

Volume 15, Issue 1

2013

Baltic Security and Defence Review is the annual publication of the Baltic Defence College

© 2013, Baltic Defence College, All rights reserved ISSN 1736-3772 (print) 1736-3780 (online)

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Layout: Oliver Toots Cover and print: Tartu University Press www.tyk.ee

Electronic version of the Baltic Security and Defence Review can be accessed on the website of the Baltic Defence College at www.bdcol.ee All articles of the Baltic Security and Defence Review are also available through the International Relations and Security Network (ISN) at www.isn.ethz.ch

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Note from the Editor—Issue 1 2013

The Baltic Defence College has produced another issue of the *Baltic Security and Defence Review* with a good mix of articles that cover current military issues such as the use of airpower, providing the right equipment to allied nations, and counterinsurgency doctrine. But we also have a mandate to encourage scholarship in the broader aspects of security, so we have included an article on international law and on Baltic region energy security. Of course, we do not ignore the military history of the Baltic region so we have a good article on the military/social history of the region so that the reader can better understand the Baltic military heritage.

Call for Articles

The BSDR is a peer reviewed academic journal and we publish articles on issues considering all aspects of Baltic security, as well as articles that deal with aspects of European security and broader conflict as well as current issues that affect the NATO nations, such as counterinsurgency and recent campaigns. Of course, we still try to maintain a Baltic focus. We are published in both print and e-editions

We invite scholars and officers to submit articles for the *Baltic Security and Defence Review*. Articles should be in English, well-researched, and be between 6,000 and 12,000 words. Articles are to be submitted in word format electronically to the editor. We use Chicago style endnote citations. Each article will be published after a blind review process. If an author has any questions we can send a style guide. If you are interested in submitting an article to the BSDR please send an email to the editor: Dr. James Corum, Dean of the Baltic Defence College, Tartu Estonia. Email: james.corum@bdcol.ee

Disclaimer: Articles published in the *Baltic Security and Defence Review* are works intended to provoke academic thought and discussion under the Baltic Defence College's mandate to provide a high quality higher military education. The views expressed in the articles are those of the author's and do not represent the official views of the Baltic Defence College or the governments of Estonia, Latvia, or Lithuania (the three nations that own the Baltic Defence College).

Targeting and Adaptation in Combat: Examining the Libya Case

By Lt. Col. Rui Romão, Pilot, Portuguese Air Force

Introduction

The directions from the commander were clear: "no boots on the ground, no comms with the rebels". The UN mandate was clear: "member states...acting nationally or through regional organizations or arrangements...to take all necessary measures...to protect civilians and civilian populated areas under threat of attack." In a matter of weeks after the crisis erupted, NATO was leading an international coalition operation over Libya with no time to fix all the split ends. Determination and a firm direction and guidance were necessary to overcome deficiencies in preparation.

As soon as operations got under way, several shortfalls were uncovered: the capacity to feed the ATO cycle in such a dynamic/kinetic operation with the right amount of intelligence was just not there. NATO simply did not have enough trained personnel to fill all the manning requirements to sustain the operation's needs. There was an over reliance on US critical enablers such as SEAD/EW, ISR and AAR capabilities, essential to the operation's success. The initial command and control structure proved to be not responsive enough and the situation on the ground demanded quick adaptations. These and many other pitfalls were brought to the surface by numerous news reports, both official and non-official, that seeded the idea that NATO is not suited for this kind of situation and that NATO is highly dependent on the goodwill of certain nations if it is to conduct its military operations. Although there is truth to many of the lessons identified, a deeper analysis reveals a different story. In spite of all the shortfalls the Alliance was able to overcome the many strategic, operational and tactical challenges with great success. By looking at how many discrepancies were corrected during Operation Unified Protector (OUP) carried out in 2011 to protect the civilians of Libya against the Kaddafi regime. The author argues that this operation was an example of successful adaptation in the midst of combat.

As OUP was coming to a closure NATO's top military commander, Admiral Stravridis, in an interview with the media laid out his main concern by saying, "top of my list is targeting-- the ability to fuse intelligence, surveillance, reconnaissance and produce coherent, precision targeting that does not cause collateral damage." This article will examine the targeting process and its links with intelligence and operational planning. It will analyze the way many identified problems were fixed during combat; the way command and control structure was fine-tuned for the mission, how manning deficiencies were overcome, how information sharing between nations was put in place, and how the target folder production capability was improved.

Commander's Objectives, Guidance and Intent (D&G)

This is the single most important phase of the targeting process.³ It is about translating strategy into tasks. It is about translating the political and military objectives, guidance and intent into specific actions that are logically linked to NATO's desired end state. If strategy and guidance are weak, tactical tasks will only emphasize that. The consequences of a weak command and control structure that gives bad targeting guidance can have dramatic strategic effects on the CJTF Mission. As Commander John Patch, a US Navy Intelligence Officer put it, "Notwithstanding the most precise and capable weaponry ever, any targeting effort absent coherent strategy or executed outside the art and rules of war can spell campaign defeat"

Targeting is all about effects, whether those are good or bad effects depends strongly on the Joint Force Commander Guidance (JFC D&G) and the way it is carried out. For Operation Unified Protector (OUP), the established Combined Forces Air Component (CFAC) mission was very clear and it, "was derived from operational and strategic level OPLANs, the strategic political military guidance from the NAC, the relevant UN Security Council Resolutions, and the objectives issued in the Berlin Ministerial on April 14, 2011: "CFAC is to conduct air

operations in the airspace of the Joint Operations Area, in order to protect civilians in Libya through the employment of kinetic and non-kinetic means against belligerent actors attacking or threatening to attack civilians or civilian-populated areas, and enforcing an air arms embargo and a no-fly zone, while permitting approved non-NATO flight activity and enabling the delivery of humanitarian aid."

The OPLAN lays out the legal framework and general guidance for targeting. It has the North Atlantic Council (NAC) approved target sets for lethal and non-lethal engagement, prohibited targets, and restricted ones. It establishes the Rules of Engagement (ROE), the use of force, and the Collateral Damage Estimate Methodology to prevent unnecessary loss of human life. The approved target sets of NAC during Operation Unified Protector (OUP) were related to ground forces or units preparing for engagement in areas populated by civilians. It also took care of facilities for ground forces such as ammunition storage and warehouses, armed groups or mercenaries, and militias. The same applied for naval and air force facilities and ports.

In short, the OPLAN describes what every functional area has to do in order to accomplish the given mission lawfully and comes from the Operations Planning Process where the Intelligence cycle has a special contribution. In NATO it results from a collaborative process between the strategic, operational and tactical levels. In this Alliance, because every nation has a say, it requires a well-established command and control structure from the political to the tactical level oriented towards the desired endstate.⁵ Not having this, and not assuring a unified command and unity of effort will cause unintended effects with undesired strategic consequences. This condition, this requirement for success, was hardly in place when Operation Odyssey Dawn was initiated in Libya. The French Air Force Rafale and Mirage fighter bombers that began strikes around Benghazi on the afternoon of 19 March, 2011 without having previously eliminated Kaddafi's integrated air defense system (IADS) is the first example of a lack of operational coordination between the US, the operation Odyssey Dawn lead nation, and the French counterpart.

The fact that this attack was announced by the French president Nicolas Sarkozy to the secretary of state Hillary Clinton and the British Prime Minister David Cameron during a summit that took place that very same weekend at the Elysée Palace in Paris might well be evidence of a national agenda driving tactical actions. Yet this was the chosen process initially preferred over a consolidated planning approach with a well-established unity of effort. A further example is the US B-2 bombers that, on that same weekend, were deployed over Libyan airfields for six hours without an official execution order shows there was a divergence between the American's tactical intentions and the slow political decision process.

During Odyssey Dawn the US directed this, "coalition of the willing" from AFRICOM Headquarters at Ramstein Air Force Base, while individual nations such as France, were commanding their assets from home. Not all the countries involved in Odyssey Dawn were satisfied with the initial confusion in the command and control (C2) structure. Norway, for instance, with six F-16s stationed in Crete decided not to get involved until command and control arrangements were clarified.9 Only after NATO took over the operations in Libya did the C2 became consolidated and operations began to run with a common doctrine, tactics, techniques and procedures. However, it should be stressed that NATO also had some C2 problems in the initial phase of OUP. At first, after NATO assumed command of OUP, it became clear that the distance between the CFAC Commander and his Air Operations Center (AOC) was not the best arrangement to guarantee an effective response to the dynamic nature of the battle space. ¹⁰ In order to have the best situational awareness Lieutenant General Ralph Iodice needed to be colocated with his AOC. "Poor situational awareness and dynamic targeting demands made tactical and operational level decisions extremely difficult. A misstep or delay in the decision cycle could have dire strategic level repercussions. While separated from the AOC it was extremely difficult to get sufficient situational awareness through traditional means, as support from specialist advisers and strategic planning staff through video teleconferences proved ineffective. Colocation of the entire CFAC enterprise with the AOC allows for tight command and control of a fluid battle space and provides the CFAC commander with the most effective means of linking the strategic, operational, and tactical levels of operation." Secondly, experience tells us how difficult it is to sometimes match an individual nation's interests with those of NATO. During an informal meeting with the NATO nations' permanent representatives, General Bouchard would state that during OUP operational planning phase, due to the national cultural differences, the national objectives were not always those of NATO.¹² In Brigadier General Robert Weighill's¹³ opinion, though, there was perfect integration between the Joint Operations Planning Group (JOPG) in Naples and the Strategic Operations Planning Group (SOPG) in SHAPE. The planning done both in SHAPE and Naples allowed putting together a true NATO operation where concerns and objectives were those of NATO and not those of individual nations. 14

In spite of all the differences between NATO nations history provides several examples of such differences that subsided and gave way to a political consensus that was fundamental to build a solid military strategy. Claire Taylor in a report to the House of Commons referred to a senior official of the US administration that would best describe this process: "And we – all 28 allies, every single one, agreed that that should be the case. And if it is judged by the commanders that there's a need to bomb forces of the Libyan regime, then the forces of the Libyan regime will be bombed, and no one is going to be able or in a position to challenge that. That is a military judgment to be made by the military authorities, and we, as an alliance, agreed today to give the supreme allied commander of Europe that authority." ¹⁵

Target Development (Target Development, validation, nomination and prioritization)—this phrase describes the process of analyzing and dissecting the problem, which is to understand the belligerent parties' or opponent's intentions and to find ways to direct or indirectly convince them to adopt what can be considered by the international community as

an acceptable behavior. The process aims to establish lists of targets that, once attacked by kinetic or non-kinetic means, should produce the desired effects and eventually positively influence the opponent or the situation. In order to select the right targets and to create the right effects and achieve the JFC objectives, a comprehensive knowledge of the situation or adversary is required. That is why this targeting phase is so dependent on the intelligence production, exploitation and dissemination (PED) process. One must identify the crisis or opponent's center of gravity, its critical capabilities and likely intentions. The idea is to analyze the problem, break it down into critical nodes or system elements, relevant enough to become a target.

In Libya, the integrated air defense system, for instance, was divided into anti-aircraft artillery, early warning facilities, and surface to air missiles or ammunition storage. The ground forces targets were divided down into ground logistic units, armored personnel carriers, armed vehicles, troops preparing to engage, or actually engaging civilians. This is an iterative process dependent on technology and human ability to produce specific knowledge about the opponent.

Putting it simply, without intelligence there is no targeting process. When NATO started to enforce the UNSCR 1973 the process was far from fully matured and this was due to several reasons. First, in the beginning (the first days of Operation Odyssey Dawn), there was not enough operational data and intelligence about the Libyan regime for effective planning. Libya had not been considered a threat for a long time, so prudent advanced planning had not been considered and Kaddafi's real capabilities were unknown. When the need for action came, the intelligence community was simply not ready to support such a high tempo kinetic operation.

Secondly, when the US led coalition strikes started over Libya there were not enough ISR assets such as E-3 AWACS, E-8 JSTARS or UAVs like the RQ-4 Global Hawk) to feed the operational planning, intelligence and targeting cycles, since these assets were being used somewhere else,

namely Afghanistan.¹⁹ Third, by the time OUP started the ISR assets problem was already fixed, although in order to produce, exploit and disseminate intelligence in the form of target folders it is crucial to have a full package of specialized and well trained experts such as intelligence analysts and targeteers.²⁰ NATO simply did not have enough of those personnel to run the PED process on its own without depending on the good will of national forces.

When Lt. Gen. Ralph Jodic, the Combined Forces Air Component Commander for OUP, decided to join the CFAC and the AOC in Poggio Renatico he quickly realized that in order to have more effective command and control over the air operations in Libya the CFAC and AOC needed more skilled targeting personnel capable of both deliberate and dynamic targeting. In addition, targeting personnel had sometimes worked in the targeting functions for only a few weeks before being rotated, which did not allow them enough time to develop the right targeting skills.

To address such shortfalls, and the inability to properly execute the PED process and support the ATO cycle, NATO responded by increasing the interfaces with national collection managers in order to build the Joint Intelligence Preparation of the Operational Environment (JIPOE) picture. This integration of national elements, liaison officers (LNOs) and intelligence officers (NICs) into the C2 structure at the tactical level corrected the initial flaws. In the CFAC more than 200 of the almost 400 personnel were liaison officers. In the CJTF UP HQ an intelligence fusion cell was created with the ability to produce NATO-owned information and distribute it to NATO members or partners. This intelligence fusion cell, putting together open source information and NIC's and NATO IFC intelligence reports, was critical to mission success.

Success in war depends on how well one knows the enemy. In irregular warfare Human Intelligence (HUMINT) is particularly important. Since in Libya NATO officially had no "boots on the ground", the ability to blend in, understand, and influence the operational environment was diminished. Although officially there were no troops in Libya, which was true in the sense of a large ground force, there were many "military advisors" connected with the National Transitional Council (NTC) and

its military arm, the rebels.²³ These personnel provided expertise and technical support, and at the same time fed intelligence directly to the nations, and indirectly to NATO.

The US sent CIA paramilitary operatives, while France and Britain sent Special Forces and some NATO partners, such as Qatar, even sent several hundred troops who connected with, trained, and advised the rebel front line forces.²⁴ Italy, Bulgaria, Egypt, Jordan and UAE also contributed with Special Forces.²⁵ This direct connection with NICs and indirect connection with the "ground forces" in Libya was quite relevant, which allowed NATO Headquarters to not only understand and influence the operational environment, improve the PED process, and ultimately produce target materials, but also supported the entire targeting process with intelligence. In General Weighill's opinion the fact that NATO did not have enough organic intelligence, production capability was not a flaw, it was actually something beneficial. There was an advantage to having access to numerous sources of intelligence (US, French, British or Arab) instead of having only one. The possibility of crossing different sources of information also decreases the probability of error. 26

If getting the information was an issue, sharing it was another one. Information sharing was always a problem among NATO members. For General Bouchard intelligence fusion was a critical issue during OUP. During a NATO mission having information for "US eyes only", "three eyes only" or "five eyes only", and not for the entire NATO community involved in the operation, reveals lack of trust between NATO nations and degrades operations effectiveness. The intelligence and information sharing has been a long lasting problem between NATO members, noted in innumerous official NATO reports. The same problem was pointed out in Operation Allied Force in Kosovo in 1999 and more recently in the ISAF in Afghanistan.

Weaponeering²⁸ (Capabilities Analysis)

Once something or someone is classified as a target it becomes necessary to identify the appropriate tool or weapon²⁹ to engage it lethally or nonlethally. Those responsible for analyzing the best capabilities to engage each target must bear in mind the targeting principles such as proportionality or military necessity and must comply with the established Rules of Engagement, the Law of Armed Conflicts (LOAC), and the need to avoid or minimize any collateral damage. This requires a resilient intelligence capability, skilled and well trained analysts and weaponeers, procedures, clear doctrine and the right set of tools such as Precision Guided Munitions. During OUP concerns about civilian casualties were far too evident in the NATO official documents where the written Non-Combatant and Civilian Casualty Cut-Off Value were equal to zero. Official NATO reports clearly demonstrate the air campaign was conducted with an unprecedented attention in order to avoid any civilian casualties (CIVCAS). In essence, during any collateral damage estimate (CDE) and during any mission if there was any possibility of inflicting civilian casualties the mission would be unauthorized or postponed.³⁰

As OUP continued there were several countries that ran short of PGMs. By mid-June the Danish Air Force had dropped over 500 PGMs, making its national stock run low. The UK, with its Dual Mode Seeker Brimstone (DMSB), had a similar problem. Countries had not expected operations to last more than three months. This, together with fact that they had an initial high rate usage, was sufficient for some inventories to run low. Countries like Canada, Norway, Belgium and Denmark realized that they had problems in keeping up with operational tempo. When the problem of precision munitions shortage started the US facilitated the transfer of weapons under the Foreign Military Sales Program. Poland, which did not participate directly in OUP, also sold precision munitions to other NATO countries. Weapons manufacturers realized they needed to improve the PGMs surge response and countries realized

the need for larger stocks. Opinions differ on whether the PGMs depletion conditioned air strikes pace or not. We know the numbers of strike sorties a day were only one third of what they were supposed to be, although according to Lt. General Jodice no sorties were cancelled due to lack of munitions. ³⁶

The fact that NATO during the PGMs shortage could have employed other types of munitions and chose not to reveals the Alliance commitment to conduct an "air campaign of unparalleled precision, which, although not perfect, greatly minimized collateral damage" ³⁷ If one considers that for this operation one of NATO pillars that needed to be considered was "strong regional support", every concern related with unnecessary losses of human lives was easily understandable. Results proved that the NATO military leaders concerns were right. The fact that some PGM manufacturers were able to react in time for the surge is an indication of their response capability and adaptation to combat demands.

Force (Force Planning and Assignment)

As the campaign unfolded the commander ensured that the Combined Joint Force remained focused on the main effort for each phase of the operation. According to operational considerations it is necessary to synchronize, coordinate and prioritize available assets, lethal or nonlethal, for the prioritized target engagement. The intention of campaign synchronization is to create a synergistic effect between joint forces while complying with the ROE, the LOAC, and the higher level D&G. Typically the JOPG from the Joint Operations Branch (within the Operations Directorate in the CITF HQ), does the long term planning (10 days and beyond), while the Joint Coordination Board (JCB) is responsible for synchronizing this long term planning with current operations (up to three days out) conducted in the Joint Operations Center. The Joint Coordination Order (JCO) is the JFC document used to amplify his D&G and keep the campaign on track. The JCO provides joint targeting guidance, balances competing component requirements, and synchronizes assets employment. In a nutshell, as doctrine puts it,

the JCO provides direction for the integration of available forces and assets in accordance with the mission.

During Operation Odyssey Dawn's opening stages the priority was to protect the 750,000 inhabitants of Benghazi from the large concentration of armored vehicles approaching the city, avoid a massacre, and then eliminate Kaddafi's IADS. After Benghazi was secure and air operations were safe the priority shifted to the ground forces related targets such as the Kaddafi's command and control critical capability. To execute the JCO guidance, to follow the OPLAN and to produce the desired amount of pressure on the opponent, and to create the desired effects, a sufficient number of forces and specific capabilities needed to be in place, equipped, trained and free of national CAVEATS.

OUP had participation from 18 nations, 14 NATO members (out of 28) and four partners. A total of 250 aircraft participated in OUP, 6500 PGMs were used, and 5900 targets were hit. These numbers hide the fact that NATO was overly dependent on the critical enablers provided by the United States such as SEAD/EW, AAR and especially persistent ISR.

Persistent ISR was provided by armed UAVs that became available to NATO only on 20 April, 2011. These assets were heavily engaged in other theaters of operations. Persistent ISR assets such as the RQ-4 Global Hawk, able to collect IMINT on 300 to 400 targets per mission, are crucial for pre-strike imagery. The success of kinetic targeting in preventing collateral damage is highly dependent on the ability of visualizing the target area and to access collateral damage. Add to that the fact that post-strike imagery also serves the Battle Damage Assessment (BDA) process and one can easily understand the importance of having ISR assets available. Due to the lack of organic ISR assets and an insufficient number of trained intelligence analysts, targeteers and weaponeers, NATO was heavily dependent on the good will of individual nations for targeting materials. During OUP approximately 85% of all ISR capability was American.

Execution (Mission Planning and Execution)

At this point it is important to differentiate deliberate from dynamic targeting. All targeting should be deliberate since this would mean that there was enough time for prudent planning, the right amount of intelligence to feed the targeting process, enough time to develop targets folders, to prioritize them, validate them and include them in the normal ATO cycle.

Reality is quite different. Crises do not have a planned schedule, and given the number of ongoing operations it is certain that there were not enough ISR assets or HUMINT to support the deliberate targeting process in all of them. The reality is that soon after operations start, as it happened in Libya, the Joint Forces ran out of deliberate targets and targeting became mostly dynamic. Some targets will be unknown until they reveal themselves. If a target is identified too late, and there is not enough time to include it in the ATO cycle, then it becomes a dynamic target⁴⁶. And reality tells us that in irregular warfare most of the targeting is dynamic, not deliberate. During OUP only 10% of the targets were deliberate; the rest was dynamic targeting.

Evidence shows that no formal or doctrinal targeting process was implemented before OUP started. This was in part because there was not enough intelligence about Libya and therefore not enough target folders developed to support such a kinetic operation. According to Major General Margaret H. Woodward, the JFACC for Operation Odyssey Dawn, the fact that there were not enough air battle managers (JSTARS, AWACS) supporting operations or the targeting process required aircrew to play the role of battle managers themselves. In this type of mission called SCAR (Strike Coordination and Reconnaissance) the, "fighters performed a kind of forward air control-air battle manager function, sequencing and deconflicting multiple attacking flights into and out of target areas. They also provided targeting information to other aircraft." Aircrew had to assume lower altitudes, estimate collateral damage, and decide whether to release a weapon or not, which in Woodward's words was "not a simple thing to do." This type of information is usually managed by experienced air battle managers with a

better picture over the unfolding combat. ⁵⁰ It might well be a nightmare for the aircrew in complex urban environments. On the other hand, this approach involves a certain degree of exposure to surface to air threats and the necessity for a rapid situation analysis and a rapid decision cycle. One question remains, is this the best setup to avoid collateral damage? Nonetheless, during the first two weeks of Odyssey Dawn with the US leading the coalition every single known target of Kaddafi's air defense system and command and control was hit, which set the stage for the safe air operations that followed. According to Claire Taylor's report, surface-to-air missiles (SAM) were indeed the greatest known threat to air operations. Kaddafi had over 400 SAMs and close to 500 anti-aircraft artillery pieces. ⁵¹ The other major portion of deliberate targets was related to Kaddafi's ground forces, all the way from multiple rocket launchers to battle tanks, which were used not only against the anti-Kaddafi forces but also against the civilian population.

In fact, the main concern in the beginning was to stop Kaddafi forces and prevent a blood bath in Misratah. The situation on the ground demanded a mechanism capable of immediate action to prevent civilians from being attacked. Because Kaddafi forces were highly mobile and unpredictable it was impossible to have all pre-planned or deliberate targeting. A solid dynamic targeting process was necessary. A meticulous process needed to be in place in the Combined Air Operations Center (CAOC) to assure an efficient and effective response to the evolving situation on the ground.

As doctrine defines it⁵⁴, once a potential target "appears" the Senior Intelligence Duty Officer wants to know if there is a positive identification (PID) or not. Full motion video from a Predator, nontraditional ISR or even from aircrew will answer that. If the target is in fact positively identified, the legal advisor will verify if it is compliant with the targeting D&G: Commanders Guidance, ROEs, LOAC or lawful targeting principles. For instance, during OUP civilian communications antennas could not be attacked since the UN mandate only permitted the attack of targets threatening civilians or civilian populated areas. If the target is valid and lawful, then the next step is determining the Collateral Damage Estimate (CDE). The CDE analyst

will plot the target location in relation with collateral damage considerations around it and determine the best weaponeering solution. The CDE considerations demand that one fine tune weapons and tactics to avoid human life or property losses.

Different CDE values determine different levels of authorization to prosecute that target. Engagement authorities vary from the CAOC commander all the way to the JFC. The most amazing thing of all is that after all this process the national Red Card Holder is still able to stop the attack. Lt. Gen. Jodice defined this process as an, "excruciating sequence of steps and checks applied to all strike missions to prevent civilian casualties and collateral damage."

Within NATO command aircrew exercised extreme caution when engaging a target. They followed a thorough and rigid checklist trying to avoid any collateral damage. Following the Commander's targeting D&G (targeting process phase one), and using trained NATO TTPs, aircrews guaranteed that NATO actions in Libyan were seen as lawful, balanced and compliant with international law. AJP 3.9 doctrine is clear when it refers to the "responsibility for lawful targeting rests at a number of levels." Those who direct targeting, those who organize it, and those who do it are all responsible for a lawful targeting. Yet one should not forget that NATO's involvement was dependent on a strong regional support from Arab partners, and having images of Libyan population suffering from NATO attacks would not support the Alliance's own center of gravity: the willingness to protect civilians.

Assessment

The last phase of the targeting process is the combat assessment, which determines if the engagement was successful, if the tactics used were correct, if the effects were the ones expected, and if there is the need for more action. Combat assessment includes Battle Damage Assessment, the Weapon Effectiveness Assessment and the Re-attack recommendation. First it evaluates if there was a hit on the target. Second it evaluates the extent of the damage produced, and finally if that damage allowed achieved the commander's objectives. Most importantly,

combat assessment allows evaluation if tactical actions are producing the right effects within the overall strategy. For that, Combat Assessment is a fundamental element in the decision making cycle and is highly dependable on the intelligence capability, be it is technical intelligence or human intelligence.

On top of that, targeting is a joint function developed with a CITF concept that is more suited for regular warfare. In the complex scenarios of irregular warfare assessment is much harder. Even with the weapon system video or the aircraft cockpit video that determines a direct hit on a soft skin vehicle or personnel carrier, it is quite difficult to determine if the effects produced were synonymous with the commander's objectives. And if we are talking about non-lethal targeting ⁵⁷ and effects produced on people it is even harder. The inflight report, the imagery intelligence (including UAV video) or the electronic intelligence are not enough simply because the effects might take a long time to measure and the entire world TECHINT might be worthless. In an operation such as OUP a strong human intelligence capability is important to access to see if results are going in the right direction. Once Kaddafi's forces moved away from normal combat tactics and into irregular urban tactics in order to avoid NATO's airpower one needed a strong human intelligence component to determine the movement or intentions of Kaddafi's forces.

In Afghanistan and Iraq the Land Component presence made it possible to employ the essential human intelligence element. As already noted, in the target development phase in Libya "boots on the ground" were not allowed and NATO did not want to give the impression of another occupation. Along with a lack of ISR platforms, a lack of responsive intelligence sharing by the troop contributing nations and a lack of realistic combat assessment training, the result was a weak assessment capability. Yet the assessment capability is essential to guarantee information superiority and a faster OODA loop. ⁵⁸

Although there were no official "boots on the ground", the presence of Special Operations Forces sent by NATO nations individually and as partners was a determining factor in assessing the operational environment. In fact, the SOF forces were the key in turning the tide in favor of the rebels against the Kaddafi forces. NATO had no official contact with the rebels and NATO's mission was to protect civilians from being attacked or threatened by belligerents, rebels or the Kaddafi forces. Some nations decided on their own to send SOF in Libya, which allowed access to critical information. It allowed an understanding the effects of air strikes, it allowed combat assessment to be carried out, and it gave NATO the chance to adjust the planning according to the development of the campaign on the ground. The most important issue about assessment in targeting is that it permits strategy to be steered. Assessment is the commander's eyes and ears in a military operation. Without assessment capability, one will fight blind and deaf and be at the opponent's mercy.

Pearls of Wisdom

The author's first identified lesson in the NATO Operation Unified Protector in Libya is that NATO represents a unique forum where lawful targeting is discussed, pursued and where a common doctrine determines that different nations conduct operations the same way. If one looks into the Joint Targeting Doctrine, on the page of reservations by nations, it is written "The position of the United States is that, for any given operation, there must be agreement on a single methodology and policy for collateral damage and CDE, including standardization of tools and methodologies, in order to maintain unity of effort and operational effectiveness." ⁵⁹

The NATO top military commander, Admiral James G. Stavridis, shares the same opinion: "Only NATO can provide the common command structure and capabilities necessary to plan and execute complex operations. Multilateral coalitions built on an as-needed basis, by contrast, have no common doctrine for conducting military operations, no common capabilities or command structure for quickly integrating

national forces into a cohesive campaign, and no standing mechanisms for debating and then deciding on an agreed course of action."

The second conclusion from OUP is the idea that the Alliance is quite short of critical enabling capabilities. To change this, the first step would be to admit the problem exists and that has been done. Through a thorough process that NATO conducted since day one of OUP lessons were identified and now a systematic and comprehensive revision of the overall ISR needs and targeting training in NATO is on the way. The third and final conclusion is that for targeting to work it must have guidance, rules, expertise, means and a process.

There was guidance all the way from the start. NATO knew exactly what to do and what could not be done in order to maintain strong regional support and the high moral ground. There were rules to avoid civilian casualties and to minimize collateral damage while protecting the Libyan people from attack or threat of attack. Having no "boots on the ground" and "no comms with the rebels" were the restraints established from day one. In the beginning, however, there was not enough expertise where it should have been. Nations, upon request, would eventually supply enough specialists where they were needed. There were sufficient means, considering the security threats that the West in particular is facing. There were not enough means to produce 300 strike sorties a day, but there were still enough to comply with the strategy established from day one. If you don't have a dog, hunt with a cat. If you don't have all the assets you want and if you can't do 300 sorties a day, you do 50, adjust and move forward. Even the most powerful nation in the world fell short in some areas, mainly in "operational data and intelligence." 61 Strategy still counts more than the amount of assets available --Afghanistan is a good example of that.

And there was a process -- actually a quite rigid targeting process. Some may say that doctrine went out the window the moment the OUP planning started. Since the beginning developments on the ground in Libya and the necessity to enforce UNSCR 1973 determined that there was not enough time to conduct the operational planning as it is routinely carried out in NATO planning exercises. However, what kept different nations from doing operations differently was the NATO doctrine. What made partners such as the Emirates, Sweden, Jordan or

Qatar confident that the right targets would be selected as well as the right way to engage them was exactly the trust in the targeting process of NATO doctrine. NATO had the ability to adapt, change and improve. NATO is getting better without losing a sense of what is important-having a comprehensive strategy and a way to implement it.

Targeting is the most noticeable joint function in military operations and has the greatest impact on them. When something goes wrong the negative effects can be tremendous. Every effort to prevent wrongful targeting is worth it. In summary, Operation Unified Protector was a successful case of adaptation in combat and with the most honorable reason behind it: the need to protect people.

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[Acedido em 24 March 2012].

- ² Pessin, A., 2011. *VOAnews.com*. [Online] Available at: http://www.voanews.com/english/news/middle-east/NATO-Learns-Key-Lessons-in-Libya-Campaign-132251973.html [Acedido em 22 03 2012].
- ³ According to NATO doctrine "Joint targeting is the process of determining the effects necessary to achieve the commander's objectives, identifying the actions necessary to create the desired effects based on means available, selecting and prioritizing targets, and the synchronization of fires with other military capabilities and then assessing their cumulative effectiveness and taking remedial action if necessary." (NATO, 2008).
- ⁴ C. Lisbon, C., 2012. *Interview about Targeting during OUP* [Interview] (February 2012).
- ⁵ The Comprehensive Operations Planning Directive proposes a definition for End State: The NAC statement on conditions that define an acceptable concluding situation for NATO's involvement.
- ⁶ D. Anrig, "Allied Air Power over Libya: A Preliminary Assessment," *Air & Space Power Journal*, Winter Issue 2011, pp. 89-109.
- 7 Ibid.
- ⁸ J. A. Tirpak, "Lessons from Libya," Air Force Magazine, December 2011.
- ⁹ Anrig
- 10 Lisbon
- 11 Ibid.
- ¹² J. Mira Gomes, "Operation "Unified Protector" Informal Meeting with Gen. Charlie Bouchard. Brussels: DELNATO. 2011.
- ¹³ Brigadier General Robert Weighill was the CJTF Operations Directorate Deputy Chief of Staff in Naples during OUP and responsible for the operational planning.

¹ UN, 2011. Resolution 1973 (2011). [Online] Available at: http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N11/268/39/PDF/N1126839.pdf?OpenElement

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- ¹⁵ C. Taylor, *Military Operations in Libya*. [Online] 2011.Available at: http://www.parliament.uk/briefing-papers/SN05909 [Accessed 18 March 2012].
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- 17 Tirpak
- ¹⁸ "It should be noted that under normal conditions NATO units are not currently permitted to hold operational target materials except for training purposes for current operations" (NATO, 2008).
- 19 Tirpak
- ²⁰ A targeteer is a person qualified to advise commanders on the validity of targets, the means to affect such targets and the appropriate means of measuring achieved affects" (NATO, 2008)
- ²¹ Lisbon
- ²² IESM, 2011. O Poder Aéreo na Operação Unified Protector. Lisbon: s.n.
- ²³ A. D. M. Svendsen, "NATO, Libya Operations and Intelligence Co-Operation a Step Forward," *Baltic Security and Defense Review*, Volume 13(2) 2011, pp. 51-60.
- ²⁴ F. Gaub, Six Strategic Lessons learned from Libya: NATO's Operation Unified Protector, (Rome: NATO Defense College. 2012). See also B. Barry, "Libya's Lessons," International Institute for Strategic Studies, 53 (Survival) vol. 53 2011, pp. 5-14.
- ²⁵ RUSI, Royal United Services Institute, *Accidental Heroes: Britain, France and the Libya Operation*, (London: Royal United Services Institute, 2011).
- ²⁶ Weighill 2012
- ²⁷ Mira Gomes 2011
- ²⁸ According with Targeting Doctrine, "weaponeering is the process of determining the quantity of a specific type of lethal or no-lethal weapons required to create a desired effect on a given target." It also states weaponeering

is far more developed to support conventional operations than for non-traditional methods.

²⁹While AJP-3.9 refers "appropriate capabilities in order to achieve the JFC's objectives", ACO Directive 80-70 refers "appropriate tool or weapon (lethal or non-lethal) in order to achieve the desired effect". The author defends the basic idea in both documents is the same: phase 3 is about selecting the "instrument" that assures the right effects are created when engaging a certain target.

- 30 Bouchard 2011
- 31 Anrig
- 32 RUSI
- 33 Barry
- 34 Tirpak 2011
- ³⁵ J. G. Stravridis, and I. H. Daalder, "NATO's Victory in Libya: The Right Way to Run an Intervention," *Foreign Affairs*, Março/Abril 2012, Volume 91, p. 4.
- ³⁶ Tirpak
- 37 Stravridis and Daalder
- 38 ibid.
- 39 ibid
- ⁴⁰ IESM, O Poder Aéreo na Operação Unified Protector. Lisbon: s.n.2011.
- 41 ibid.
- 42 Lisbon
- 43 IESM.
- 44 Lisbon
- 45 IESM
- ⁴⁶ AJP 3.9 refers that Dynamic Targeting prosecutes targets that have been identified too late, or not selected for action in time to be included in the deliberate targeting cycle and therefore have not been scheduled.

- ⁴⁷ Anrig
- 48 Tirpak
- 49 Ibid.
- 50 Ibid.
- ⁵¹ C. Taylor, *Military Operations in Libya*. [Online] 2011 Available at: http://www.parliament.uk/briefing-papers/SN05909 [Accessed 18 March 2012]. Taylor 2011
- ⁵² Lisbon 2012
- 53 Lisbon 2012
- ⁵⁴ NATO has a defined CDE methodology align with individual nations, in order to have a standardized method among nations. The fact nations do it the same way accelerates the decision process.
- ⁵⁵ NATO Targeting Doctrine defines the Red Card Holder as the national representative who is responsible for the compliance of the NATO Targeting Process with his national Targeting Directives and CAVEATS during the engagement of a particular target. The Red Card Holder is able to intervene in the planning process of an engagement in the case that an asset of his nation is foreseen for the engagement or its support.
- 56 Tirpak
- ⁵⁷ Doctrine defines a non-lethal weapon as one explicitly designed and primarily employed to incapacitate or repel persons or to disable equipment, while minimizing fatalities, permanent injury and damage to property and the environment.
- ⁵⁸ Observe, Orient, Decide and Act: see IESM.
- ⁵⁹ NATO, *AJP-3.9 Allied Joint Doctrine For Joint Targeting*. Brussels: NATO Standardization Agency, 2008.
- 60 Stravridis and Daalder.
- 61 Tirpak

Light Attack to the Rescue Solving a Critical Capability Gap in Irregular Warfare

By Col. Russell J. Smith, USAF ret., Beechcraft Corporation.

Arguably the most important military component in the War on Terror is not the fighting we do ourselves, but how well we enable and empower our partners to defend and govern themselves.¹

—Defense Secretary Robert H. Gates

Do not try to do too much with your own hands. Better the Arabs do it tolerably than that you do it perfectly. It is their war, and you are to help them, not to win it for them. Actually, also, under the very odd conditions of Arabia, your practical work will not be as good as, perhaps, you think it is.

—T.E. Lawrence, 27 Articles, The Arab Bulletin, 20 August 1917

In this present era of global budget cuts, deficit spending, economic crisis, and sequestration, it is not uncommon to hear the latest headline heralding another shortfall in military readiness. But it may come as a surprise to many to learn that the U.S. Air Force has had and continues to have a perennial capability gap in Irregular Warfare (IW). The gap is not apparent in the way that the U.S. Air Force has tactically prosecuted counterinsurgency (COIN), where it has performed admirably under difficult circumstances for nearly 11 years running. Indeed, Airmen have labored tirelessly over the last decade to provide world-class close air and intelligence, surveillance, and reconnaissance (ISR) support to ground troops as well as use global mobility to sustain conflicts in multiple theaters.² The IW gap exists in the strategic – and more important, as some have argued³ – capability of building partner capacity, specifically with respect to building a partner nation's indigenous tactical airpower.

IW refers to, "A violent struggle among state and non-state actors for legitimacy and influence over the relevant population(s). Irregular warfare favors indirect and asymmetric approaches, though it may employ the full range of military and other capacities, in order to erode an adversary's power, influence, and will. Also called Irregular Warfare."



AT-6 drops 500 lb laser guided bombs (Beechcraft photo)

Building Partnership Capacity

The strategic importance of building partner capacity is well documented both throughout history and in current Department of Defense (DoD) directives. The DoD's strategic guidance of January 2012 articulates future priorities, and while the guidance directs a rebalance toward the Asia-Pacific region, it also notes other destabilizing threats due to violent extremism worldwide, but particularly in the Middle East. The 2010 QDR, in similar fashion to the 2006 QDR, gave specific direction to ensure that the U.S. would continue to build up the security capacity of our partner states. In fact, the 2010 QDR identified a "persistent shortfall" of capability for training partner aviation forces. Likewise, the Air Force adopted 12 new Service Core Functions in 2010, among them

Building Partnerships.⁸ Though the Air Force has since reversed course on its fledgling Building Partnerships doctrine, the priority of enabling partnership capacity still remains. In fact, in February 2013, new U.S. Air Force Chief of Staff Mark Welsh approved and signed the Irregular Warfare Operations Roadmap, which provides a plan of action to establish, maintain, improve, adapt, and evaluate the U.S. Air Force's operations against irregular warfare threats. This Roadmap is an extremely encouraging sign and demonstrates that the new Chief recognizes the importance of filling this gap. To meet the vision of the Roadmap, the Air Force will now organize, train, and equip a force as proficient and capable in IW as it is in traditional war fighting. The actions are designed to institutionalize capabilities relevant to IW within the General Purpose Force. 10 Finally, Air Combat Command's IW Operating Concept states, "Building Partnership Capacity [BPC] is effectively both a preventive measure and an exit strategy for the United States for operations across the spectrum of conflict."11 Partner capacity can be measured in many ways, but certainly modern history has taught us that security in the midst of a counterinsurgency cannot be achieved without the effective use of aviation resources. Building up an indigenous air force should be a primary concern of U.S. airpower and State Department planners, who have demonstrated a penchant for excelling in campaign Phases II (Defend and Seize Initiative) and III (Dominate), 12 but have performed less than brilliant in the critical stages that follow. 13 Indeed, a coherent exit strategy demands a capable organic military force for the vanguished foe.

The U.S. Air Force expects to be part of a Joint Force and must embrace the need to "[work] with and through partner nations...to establish a secure environment in which partner nations can flourish—ultimately without direct assistance." Therefore, the goal should not be for the U.S. Air Force to provide all air assets for all of our partners, rather the Air Force—as well as other services—should be called upon to assist in the build-up of our partner nation's organic air operations capability. The fact that the U.S. Air Force has performed superbly delivering airpower in support of ground troops is not the measuring stick which should grade our effort; the evaluation criteria should focus on how well we've enabled our partners to provide these airpower tasks organically. The goal of

establishing a credible air force for our partner nations continues to elude the U.S. Air Force in IW endeavors despite its attempts to supply military resources. 15 This mission should begin immediately after some measure of air superiority and air base security is attained. Unfortunately, this is something the military strategists ignored in Iraq for several years. 16 In fact, one could easily make the case that our "large force" departure in Iraq was delayed by years due to the incomplete exit strategy developed, specifically with regard to rebuilding the Iraqi Air Force, which the U.S. devastated during Phase II and Phase III operations. After demolishing Iraq's organic air force, it took over six years to deliver the first T-6 Texan II (fixed wing military training platform) for Iraqi pilot training. Today, Iraq still does not have a fixed wing tactical aircraft to conduct organic close air support (CAS), border patrol, armed reconnaissance, or air sovereignty missions. ¹⁷ A comprehensive plan to provide replacement training and operational aircraft as well as rotary wing assets should have been established well prior to March 2003, when Operation Iraqi Freedom (OIF) kicked off. We have seen a similar pattern in Afghanistan, where tactical fixed wing aircraft have yet to make an appearance. The stronger we make our allies, the less likely that vacuums of power will tempt others to come in to fill the void, as has occurred in Iraq. 18 Illustrating the volatile state that Iraq has become, 57 coordinated and violent attacks took place all over Iraq on 15 April 2013 (improvised explosive devices, suicide bombers, complex attacks, mortar/rocket fire, small arms attacks, etc.). 19



Light Attack Aircraft austere runway operations (Beechcraft Photo)

There is another reason why equipping a partner nation quickly with indigenous air power is critical as an exit strategy-validation from the host nation populace. A critical aspect of counter insurgency involves the host nation's government gaining and retaining legitimacy by giving the appearance of being in charge. 20 Keep in mind that IW is a competition, between insurgents and friendly forces, for the hearts and minds of the relevant population. When all the air support is provided by the "invading" country, the general populace is skeptical and extremely intolerant of collateral damage. What message do we send an ally when 10 years after the initial stages of combat we are still flying B-1 bombers overhead, providing close air support to troops on the ground? In my mind, there are only two possible messages: 1) "Your country is safe only while we are here in force, employing state-of-the-art military hardware you will never be able to acquire on your own," or 2) "We are imperial occupiers and continue to be in charge." Both of these connotations are bad yet this is the method we have chosen to provide "stability" during Phase IV operations. Deploying and establishing a credible presence amongst the native population's air force is a sure way to avoid the "imperialist" name tag during air operations. 21

Airpower is the U.S./NATO/coalition military's asymmetric IW enabler; however, its use is subject to incredible scrutiny. Avoiding collateral damage during Phase IV Stability Operations is paramount—certainly we have learned over the last 12 years that what you don't hit is as critical as what you do hit. Airpower's ability to bring devastating and decisive effects accentuates the restraint necessary when employing it. Like it or not, airpower is judged by a different standard than ground power; civilian casualties from ground combat simply do not receive the same media interest as those resulting from air operations.²² In Afghanistan, of the thousands of sorties allocated to close air support, only a small fraction has caused civilian casualties; yet these aberrations have defined the public, media, and political perception of what airpower is doing there.²³ Insurgents have proven extremely successful at removing airpower's asymmetrical advantage by hyping up and even creating collateral damage near bombing sites; their tactics have led to disproportionately adverse effects on the COIN campaign. In fact, these well-orchestrated and

brilliant strategic communication stratagems by the insurgency have proven so effective in Afghanistan (with widespread global media coverage) that President Hamid Karzai has become well known for his tirades against the use of airpower. As recent as 17 February 2013, President Karzai deplored the use of NATO airpower, leading the top commander in Afghanistan, Marine General Joseph Dunford, to support the President's intent to ban Afghan forces from calling in foreign air support, a move that will leave already under-equipped Afghan troops even more vulnerable.²⁴ There's a flip-side to this coin, though; civilian casualties inflicted with a host country's indigenous airpower/military scarcely draw attention. In fact, many airpower scholars have lamented this fact while imploring our own militaries to shift the burden of warfighting to the partner nation.²⁵ Shifting the burden of supplying airpower to the host nation not only lends credibility in the eyes of the relevant population, but it can aide in preserving the powerful asymmetric advantage that airpower brings to the fight.



Iraq AF Lt. Gen Anwer congratulates officers on successful mission (Author's photo)

It may be useful to remember that the U.S. Air Force gained its independence after World War II by emphasizing an inherently offensive and strategic mission; today, its core functions are air and space superiority, rapid global mobility, and global strike. Thus, an effective IW capability is not something the U.S. Air Force has embraced consistently throughout its history. The 2006 RAND study, Air Power in the New Counterinsurgency Era, observed that creating a wing-level organization for aviation advising "is likely to be the single most important initiative the U.S. Air Force can take to enhance its own counterinsurgency capability."26 While the Air Force has established an air advisory group based at Randolph Air Force Base, San Antonio, it still has much to accomplish in order to comply with the recommended RAND guidance. Col Billy Montgomery, in his Air Force Special Operations Command (AFSOC) White Paper, outlines the general concept of an Irregular Warfare wing. The wing was to be comprised of aircraft capable of six distinct functions: light mobility, medium mobility, heavy mobility, light strike, rotary wing, and manned intelligence, surveillance, and reconnaissance (ISR).²⁷ Note that the light attack aircraft fulfills two of these roles, light strike and ISR, adeptly. The concept of the wing was to provide a cohesive structure to train, deploy, sustain, redeploy and reconstitute together. The units under the IW wing were designed to conduct both operational missions and partner training missions in theater while the structure inherent in the wing provided an institutional safeguard to prevent against approaching IW and BPC in a haphazard and ad-hoc manner, something that happened in the Vietnam era.²⁸ Aside from the 6th Special Operations Squadron (SOS), the Air Force has no means of performing simultaneous IW and BPC. 29 Many of the problems intrinsic to our painfully slow progress in Iraq could have been avoided had the Air Force established a dedicated IW wing trained and prepared to support partner ground forces with intelligence, surveillance, and reconnaissance (ISR), mobility and strike missions in 2003.

Currently, the only alternatives the U.S. can offer partner nations in the way of fixed-wing armed aircraft are the F-16 and F-18. For many of our allies, this may not be an appropriate solution. Many of our partner nations are in the same situation as Iraq was and is now...they don't necessarily need F-16s to rebuild their air forces – though they definitely

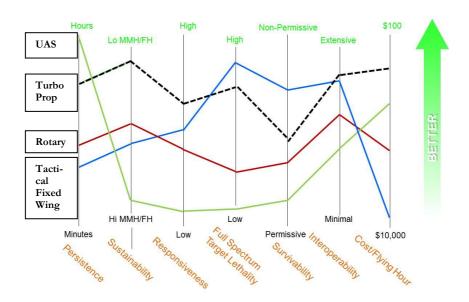
want them and will eventually receive them; they need reliable, capable, easy-to-maintain, and affordable airframes to train their pilots and maintenance crews and to conduct basic sovereignty missions like border security, ISR, and close air support.³⁰ Both the F-16 and F-18 offer tremendous capability, but they are clearly not the right fit for most of our allies. While a security force provider or infantry soldier can be produced relatively quickly, the same is not the case for building and equipping a modern air force. Modern jet fighters are expensive and complex machines, requiring years of intensive training programs to master effectively. This takes time—a precious commodity that countries do not have in abundance.³¹ Why not introduce a capable, affordable, simple to maintain, and forgiving airframe instead?³² In March 2010, Maj Gen James Mattis promoted light attack aircraft as a "means to build partner capacity with effective, relevant air support."³³ The light attack aircraft fulfills all the traditional sovereignty roles while providing an extremely reliable airframe with low life-cycle costs, something that jet fighters do not offer. Many other partner nation air forces (e.g., Afghanistan) are simply less adept to handle the complexity of an F-16 or F-18 fleet, not only from a flying perspective, but also from a maintenance and logistics perspective. After a successful transition to the light attack aircraft, Afghanistan – and many other countries like it – could consider bolstering their air force with additional, more technically sophisticated aircraft, but the first step should be a reliable, easy-to-maintain light attack aircraft. As we saw in both Iraq and Afghanistan, building a partner nation's air

As we saw in both Iraq and Afghanistan, building a partner nation's air force takes time, and in the meantime, insurgents continue to get a vote. Ideally, the U.S. should be poised to prosecute air-to-ground COIN operations at any time...with a light attack aircraft in their arsenal. In this manner, the U.S. Air Force could augment a partner nation's air force by providing simultaneous operations and training missions in country *immediately*. Furthermore, the light attack aircraft, which could be operated from austere runway environments, could be utilized without the need for robust, hardened, and multi-million-dollar aerodrome facilities and paved 10,000' runways. The U.S. needs an indigenous light attack capability to, when necessary, "stave off the wolves" while it builds the partner nation's air force into an organic and autonomous fleet.³⁴ And let's not forget the

F-20 debacle, whereby the U.S. attempted to sell an air-to-air capability that it wasn't willing to purchase itself, thus defacing any credibility in the weapons system. Other nations often resent what they perceive as a paternalistic U.S. attitude with respect to its domestically manufactured aircraft that the U.S. doesn't itself operate. If light attack is indeed the building partnership tool we intend it to be, it will be critical for the U.S. Air Force to acquire the aircraft and develop a cadre of experienced light attack instructors who can impart their proficiency to our partner nation's air forces. After the Light Attack and Armed Reconnaissance program was defunded (this program would have given the U.S. Air Force an organic light attack capability), many of our partner nations became reluctant to purchase light attack aircraft.

The Ideal Attributes for a Building Partnership Capacity Aircraft

In 2007, Whitman, Bradley, and Brown conducted a study for Hawker Beechcraft Corporation, comparing the virtues of unmanned aerial systems (UAS) or remotely piloted aircraft (RPA), rotary aviation (attack helicopters), tactical fixed wing aircraft (F-15E, F-16, A-10, F-18, etc.), and turbo-prop light attack aircraft. ³⁶ The study ranked the types of air assets identified above in accordance with the following attributes: persistence (time over intended target), sustainability (measured in maintenance man hours/flight hour required), responsiveness (time to target), fullspectrum target lethality (low collateral damage, sufficient payload), survivability (against ground-to-air and air-to-air interoperability (with munitions, pilots, systems), and cost per flight hour. The ideal air asset would offer generous persistence, high rates of sustainability, quick responsiveness, full compatibility with precise, stateof-the-art weaponry, high survivability, high interoperability, and low cost per flight hour.



Let's examine each of the air assets separately across the seven attributes:

Unmanned Aerial Systems (UAS) / Remotely Piloted Aircraft (RPA)

Persistence is the cornerstone of UAS/RPA operations. No other air asset can provide near the round-the-clock coverage that a Predator, Reaper, or Global Hawk can. **Sustainability** is degraded for a few reasons. First, operational and strategic UAS often recover to remote airfields long distances away from the front lines where they are being employed. Second, the UAS internal systems are technically sophisticated with high reliance on space and satellite communications with little back-up or degraded capability. **Responsiveness** is rated low...for several reasons. UAS/RPA travel very slowly and cannot turn around or change course quickly. Additionally, UAS/RPA are normally assigned to a specific sector to monitor a high value target or to provide reconnaissance for a specific operation. The tasking for UAS/RPA normally flows

through the supported ground commander and is controlled by the G2 (Division level or higher Intelligence) or the G3 (Division level or higher Operations). Normally a UAS/RPA has a preplanned and approved "deck" of preplanned points of interest for observation. Interrupting a UAS/RPA orbit and getting permission to "re-task" the UAS/RPA to support action in a different sector is not a simple or speedy process. *Full-spectrum target lethality* is low due to the limited types and munitions load that a UAS/RPA can carry and employ. Additionally, UAS/RPA are not the quickest or most agile assets to move quickly to a fleeting mobile target. *Survivability* is ranked low due to the relatively permissive environment that a UAS/RPA must operate in. In fact, UAS/RPA aircraft experience higher loss rates and require a phenomenal number of skilled personnel to carry out a single surveillance mission. ³⁷



US UAV (USAF Photo)

Interoperability and *cost per flight hour* are rated in the middle, though that rating seems generous in light of the enormous support package necessary to process, exploit and disseminate UAS/RPA data. One source maintains that each orbit requires 120 personnel per 24-hour shift.³⁸

Plagued by the "soda straw" phenomenon (the very narrow angle of view at mid-to-high powers of magnification), limitations in situational awareness, relative slowness to engage targets, and completed dependence on a very extended communications network, RPAs are far more expensive to operate as a system than any other comparable manned aircraft.³⁹ Furthermore, any real-time RPA operation must use continuous communications and video feeds. We now know that the Taliban and al-Queda have been downloading RPA video feeds for some time. 40 Finally, there is little chance that the U.S. would ever give a developing nation a fully operational, highly advanced RPA squadron along with its codes and satellite access. There is even less chance that such a nation could operate it effectively at the tactical or even operational level, maintain the squadron over an extended period of time with any degree of effectiveness, afford it financially, or fully staff the unit with highly trained personnel.⁴¹ In other words, while UAS/RPA fill a necessary niche in our stabilization operations, they do not fulfill any type of BPC role.

Rotary Aviation

Persistence is ranked low while sustainment and responsiveness score marks in the mid-range. While rotary air is certainly not fast, it is forward deployable and can be positioned close to anticipated usage. Another advantage of being forward deployed is being connected to the ground commander's intent. Unlike UAS/RPA and tactical jet fighter aircraft crews, helicopter crews attend ground commander's briefings and remain connected with the ground scheme of maneuver, high value targets, rules of engagement, and named points of interest. This connection with the ground unit has allowed Army rotary aviation to engage targets via a five-line close combat attack (CCA) protocol; fixed wing tactical aircraft assets must use an expanded Joint Publication 3-09.3 nine-line procedure. Army aviators claim the reason they are allowed to expedite attacks is because they are already aware of the battlespace constraints while other fixed wing aviators are typically showing up to the area from deployed locations far away from the battlespace.



Iraq AF performs Medevac (USAF Photo)

Fixed wing assets typically require a battlespace update from the Joint Terminal Attack Controller (JTAC) on the position of friendly units, named points of interest, and targets. Full-spectrum target lethality for rotary aviation scores a low-to-mid ranking while survivability rates on the low end of the scale. Target lethality is partially limited by two factors inherent in rotary aviation: slow speed and low altitude. These two characteristics may limit weapons' effects and prohibit usage of GPSguided munitions. On the plus side, though, Apache attack helicopters can carry up to 16 Hellfire missiles, making a powerful statement. Although austere countries like Afghanistan lend themselves to the use of helicopters for ingressing and egressing rough terrain, a developing partner may find that their higher cost, lower reliability, and slower speed often outweigh their utility. 43 Severe Apache losses in Operation Iraqi Freedom (2003) illustrated just how vulnerable rotary air is to ground threats. Two Apaches were destroyed and 29 damaged during the raid on Najaf alone.⁴⁴ Critics of the multimillion dollar chopper view the Najaf retreat as the Apache's "Little Big Horn"-proof that it is too vulnerable to survive modern combat. They argue that the Apache is a relic of Cold War planning that failed at its primary mission: deep attack. 45 Due to the low altitudes that rotary must fly to avoid detection, sound often becomes the primary signature recognized by people on the ground...this can tip off an attack. *Interoperability* ranked mid-to-high while *cost per flight hour* scored in the middle.

Tactical Jet Fixed Wing Aviation

Persistence is ranked low for tactical fixed wing aviation. Fighters show up "on station" and depending how far they have had to travel, may show up with limited amount of "playtime" or loiter time. A-10s and F-15Es typically have longer duration than other fighters and attack aircraft and often are able to mitigate time off station by "yo-yo" tanker procedures, which allow single-ship operations to and from the airborne tanker, albeit at significant cost for the Joint Force. **Sustainability** ranks low-to-mid while **responsiveness** rates in the mid-range. As mentioned before, modern jet fighters are complex machines requiring years of maintenance and pilot training to achieve maximum rates of utilization. Additionally, these are prone to foreign object damage on unimproved runways and taxiways, thereby necessitating operation on long, improved runways.

B-1B Lancers and F-15E Strike Eagles typically deploy to Afghanistan from remote bases, limiting their responsiveness despite their extremely fast top end speed. *Full spectrum target lethality* and *survivability* both rank high, as one might expect. A multitude of precision-guided munitions is available for tactical fixed wing aviation and these aircraft can typically fight their way into the battlespace despite sophisticated air defense radars and radar-guided missiles. *Interoperability* ranks mid-to-high, but *cost per flight hour* is the highest (in terms of \$) of any of the candidates. BPC efforts for our partners are limited to the F-16 and F-18, though not all developing countries are ready to adopt fourth-generation fighters for all the reasons aforementioned.

Turbo-Prop Light Attack

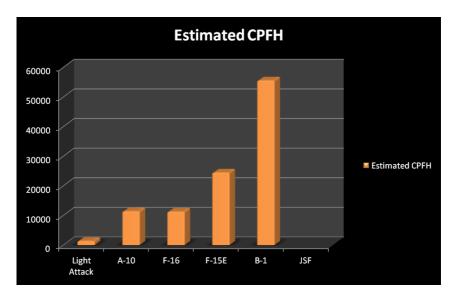
Light attack aircraft in this category fill a niche location on the chart, which quantifies why they have so much appeal to allies equipped with modern technology as well as to developing partner nations. The primary light attack aircraft today are the Beechcraft AT-6 and Embraer A-29 Super Tucano; both aircraft utilize a Pratt & Whitney 1600 SHP engine, pressurized glass cockpit with zero/zero ejection seat capability, data link (including variable message format, situational awareness data link, or Link-16 connectivity), and an electro-optical/infrared sensor that can provide video via a ROVER (remote optical video enhanced receiver) compatible data link. 46 Performance characteristics are comparable though the AT-6 possesses a much higher certified Mach number (.67M). Persistence, sustainability, and responsiveness all rank high on the WBB chart. AT-6 light attack aircraft, for instance, can loiter in excess of six hours after arriving on station, providing the ground commander much needed overwatch. Maintenance costs are extremely low, with the AT-6 light attack aircraft estimating 2.5 maintenance manhours per flight hour, a figure substantiated by Air Education & Training Command for the T-6 trainer variants. ⁴⁸ The AT-6 has an added benefit of 800+ T-6 training aircraft deployed in the world today, with an established logistical footprint and 85% commonality between airframes. The A-29 Super Tucano boasts approximately 170 operational aircraft in the world, primarily in South America.⁴⁹ Responsiveness is excellent for both aircraft as each can be forward deployed, close to the battlespace in which they expect to fight in. All the benefits of being connected to the ground commander's scheme of maneuver apply to the light attack aircraft as well. Full spectrum target lethality and survivability are rated in the middle for the light attack turbo-prop aircraft. As the study was accomplished in 2007, several recent advances have occurred which would effectively elevate the lethality scorecard. For instance, the AT-6 has been fitted with both Military-Standard 1553 and 1760 bus technologies, enabling connectivity with a new suite of counterinsurgency weapons. In fact, in 2012 the AT-6 became the very first - and only, at time of publication - fixed wing aircraft to fire laser-guided rockets. The aircraft has also demonstrated Hellfire successfully as well as several variants of laser-guided munitions.⁵⁰ The A-29 Super Tucano boasts certification of over 130 different weapons configurations. ⁵¹ Perhaps one of the most vocal criticisms of the light attack platform is its susceptibility to attack from the ground. These seem to be overblown as both the Super Tucano and AT-6 possess a missile warning and countermeasure suite and the ability to integrate with other defensive accourrements. The A-10, after all, does not have radar and did not carry a defensive electronic countermeasures pod during the overwhelming majority of its action in Afghanistan and Iraq. Light attack aircraft (A-29 and AT-6) possess sensor systems capable of guiding weapons, locating insurgents, and transmitting full-motion video real-time. 52 Survivability is enhanced with both aircraft sporting Kevlar armor reinforcement to protect the pilot, engine, and fuel system. The AT-6's armor is certified to stop penetration of a 7.62mm round⁵³; the A-29 has logged more than 180,000 flight hours, to include 28,000 combat hours with no combat losses.⁵⁴ While some degree of air superiority must exist for employment (similar to conditions for A-10 employment), light attack aircraft are far more survivable than helicopters and they will serve their role with distinction in combat.⁵⁵ Interoperability is rated mid-high while cost per flying hour is rated high on the WBB scale (translating to a low cost per flying hour). The AT-6 is interoperable with the T-6 (85% commonality in parts), MX-15di sensor pod (used on King Air special mission aircraft as well as many others), all NATO munitions, and all U.S.-made counterinsurgency weaponry built for standard 14-inch lug spacing. 56 And don't forget the familiarity that thousands of pilots share with the T-6...making the transition to an AT-6 relatively painless. Cost per flying is estimated at \$1200 per flight hour for the AT-6 and \$1575 per flight hour for the A-29 Super Tucano. 57

Turbo-Prop Light Attack Budget Relevance

The fact that the U.S. Air Force is still flying B-1Bs and F-15Es over Afghanistan today (2013) is wasteful and represents overkill, in most cases analogous to hunting gnats with an elephant gun. Keep in mind that only 2.6% of all ISR (Intelligence, Surveillance, & Reconnaissance) and CAS (Close Air Support) sorties in 2010 & 2011 resulted in any type of kinetic option from the airplane (strafing pass, bomb drop).⁵⁸ The kinetic operations percentage plummeted in 2012, further reinforcing the need for a cost-efficient and effective aircraft to perform ISR and CAS missions in a relatively low-threat Stability Operations environment. Without a doubt, the hours and years of toil in the desert have worn out precious national airpower resources which certainly could be called upon at any moment to conduct their primary and broad spectrum tactical missions should conflict erupt in Iran, North Korea, or over the China Sea. These are places where these aircraft's ability to conduct operations against a dense threat array will be desperately needed. The Service Life Extension Programs (SLEP) necessary to sustain these aircraft (F-16, A-10, F-15Es, etc.) over the last 10 years has been extremely costly to the American taxpayer as well. The latest F-16 SLEP and avionics upgrade in 2011 was estimated to cost \$3 billion. ⁵⁹ This upgrade will only cover specific Block 40/52 F-16 models and its cost does not begin to account for previous F-16 and A-10 SLEPs necessary to maintain these war birds in combat-ready flyable operation. Previous papers on light attack highlighted the fact that well over \$300M per year could be saved simply by substituting light attack aircraft for one and a half squadrons of deployed fighters. 60 In addition, it has been shown that \$1.5 billion per year could have been saved by substituting light attack aircraft for 95% of the counterinsurgency missions (primarily CAS and ISR missions) flown in Afghanistan. 61 It is easy to see how Air Combat Command could have paid for the acquisition cost of 300 light attack planes in little more than three years' time, while saving their Phase II and Phase III workhorses (A-10, F-15E, F-16, B-1) for many more years. Indeed, the money spent on F-16 SLEPs alone, due to overuse in austere environments deployed overseas, could have been used to develop a significant light attack arsenal capable of BPC, ISR, and/or

CAS missions. The business case for light attack is strikingly clear when one compares cost per flying hour data among the different airframes.

| <u>Airframe</u> | Estimated Cost Per Flight |
|-----------------------|---------------------------|
| Hour 62 | |
| Light Attack Aircraft | \$1,200 / \$1,575 |
| A-10 | \$11,413 |
| F-16 | \$11,27 0 |
| F-15E | \$24,493 |
| B-1B | \$55,582 |
| JSF | \$????? |



The same can be said for the demands of the unopposed CAS mission, which could be performed far more cheaply if the air component had available an adequate number of

lower-end light attack aircraft fielded expressly for that mission in a fairly permissive counterinsurgency setting.

—Dr. Benjamin Lambeth⁶³

Conclusion

By publishing a new Roadmap for Irregular Warfare, the new Chief of Staff for the Air Force, General Mark Welsh, has seized the opportunity to institutionalize a wide-ranging expertise in IW, to include the General Purpose Force. This is a positive sign that the traditional ebbs and flows of IW emphasis will recede and be replaced by an enduring commitment to both traditional and IW adeptness. But more must be done to ensure that we position ourselves in the strongest state of readiness for our allies. The acquisition of the light attack aircraft for our U.S. Air Force as well as our partner nations is critical to our broader U.S. interests and will serve as a key enabler, minimizing the time spent in Phase IV (Stabilization Operations) and maximizing our interoperability between other nation's air forces. This commitment to light attack will translate into fewer deployments, stronger allies, and an abiding trust from our partner nations. Furthermore, the BPC gap we fill now will prevent engagement by other countries (China, Russia, and Brazil) which may not have U.S. interests at the forefront.⁶⁴ Light attack aircraft could fill a unique niche in our U.S. Air Force inventory; capable of simultaneous training and operational missions with our partner nations...this is something that the F-35 cannot offer.

It is difficult to categorize the wars in Iraq and Afghanistan as anomalies. Their duration, the rise of non-state actors, and the nearly global assimilation of technologies, which have enabled such actors to threaten the interests of nation-states, suggest more than a passing phase in the conduct of warfare. Acquisition of the light attack aircraft for U.S. usage as well as Building Partner Capacity may precisely be a capability that

would produce huge dividends in not only prosecuting a COIN conflict, but also in supporting our State Department's security interests around the globe. ⁶⁵

How the US Should Respond

There are numerous reasons why the light attack aircraft should be acquired by the U.S. Air Force. Below are some missions they can perform:

They can serve as a companion trainer for fighters/bombers (F-22/F-35, F-16, A-10, F-15E, B-1, B-2, B-52). The Cost per flying hour savings would be enormous while keeping fourth/fifth generation pilots sharp.

- The U.S. Air Force is operating the oldest fleet in its 65-year history. Our current fleet of F-16, F-15E, and A-10 aircraft is already stretched thin by overuse in the Gulf region and if used at the current flying hour rates, may be unlikely to provide significant assistance in 10 years due to attrition.⁶⁷ In fact, the average age of our most gifted COIN/CAS airplane today, the A-10, is 30.8 years.⁶⁸
- Disaster relief ISR "eyes in the sky."
- Close air support, combat search and rescue trainer/aircraft. Ten years from now, which aircraft in our inventory will be called upon to provide "danger close" CAS in support of our Army/Marine Corps brothers in the trenches?
- An additional source of capital to fund the F-35 program (by offsetting F-15E, F-16, A-10 hours). Have we seen the last program delay for the F-35?
- Who will provide our JTACs currency in ten years? Keep in mind the astronomical cost per flight hour of the F-35 and F-22....
- These are low cost ISR aircraft, especially when compared to the P-8A, P-3, E-3A, and B-1.

- These are enablers for joint air-to-ground integration.
- These aircraft allow for forward deployment to synchronize fully with ground commander's intent.
- These aircraft provide enormous cost savings while maintaining a CAS/CSAR proficiency in our Air Force.
- Light attack could be dedicated to specialized SOF units for covert air support.
- Light attack rear seat could be utilized by: ground commanders, JTACs, combat systems officers, intelligence officers, signals intelligence operators, spotters, etc.

As the Air Force ponders its future one can only hope that it will consider beefing up its COIN and CAS capability in the near-term with light attack aircraft. If the U.S. Air Force is truly serious about developing what General Rice (commander for Air Education & Training Command) calls a "Culture of Cost-Consciousness," then surely it will make the right decision and develop the best Air Force to combat the next most likely threat to America's interests.⁶⁹

(As Amended Through 31 October 2009), p. 280.

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Secretary Robert Gates Speech to Kan

¹ Secretary Robert Gates. *Speech to Kansas University*. Manhattan, Kansas, Monday, November 26, 2007. (accessed at http://www.defenselink.mil/speeches/speech.aspx?speechid=1199 on 13 Feb 08)

² Maj Timothy Murphy, "A New Chief of Staff, a Golden Opportunity," *Air & Space Power Journal*, Volume 27, Issue 1, January-February 2013, p. 145.

³ Col. John D. Jogerst, "Preparing for Irregular Warfare, The Future Ain't What It Used to Be," *Air & Space Power Journal*, Volume 23, no. 4 (Winter 2009), p. 68, accessed 21 March 2013 at: http://www.airpower.au.af.mil/apjinternational/apj-c/2011/2011-1/2011_1_07_jogerst-E.pdf.

⁴ Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms, 12 April 2001

⁵ Department of Defense, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense* (Washington, DC: Department of Defense, 2012), 2, http://permanent.access.gpo.gov/gpo18079/DefenseStrategicGuidance.pdf.

⁶ Department of Defense, *Quadrennial Defense Review Report* (Washington, DC: Department of Defense, February 2010), p. 17, http://www.defense.gov/qdr/images/QDR as of 12Feb10 1000.pdf.

⁷ Ibid, p. 30.

⁸ Department of the Air Force, Presentation to the Senate Armed Services Committee, Fiscal Year 2010 Air Force Posture Statement, p. 2.

⁹ Ms. Renee Novak, Lt Col Peter Garretson, "Adding Teeth to the Equilibrium between Special Operations Forces and the General Purpose Force," *Air & Space Power Journal*, Volume 27, Issue 2, March-April 2013.

¹⁰ Ibid., with original authors' emphasis.

¹¹ Air Combat Command's Irregular Warfare Operating Concept, 25 Jul 2008, p. 13.

¹⁵ Lt Col George H. Hock, Jr., "Closing the Irregular Warfare Capability Gap: The Missing Puzzle Piece; Rugged Utility Aircraft and Personnel," Air & Space Power Journal 24, no. 4 (Winter 2010): 63, http://www.airpower.maxwell.af.mil/airchronicles/apj/apj10/win10/2010_4.pdf

¹⁶ Clint Hinote, in "The Drawdown Asymmetry" (see footnote #14) captures the essence of the problem: "The 1991 Gulf War, the intervening years of nofly enforcement, and the invasion of 2003 left the Iraqi Air Force completely devastated. With the exception of some base infrastructure, almost nothing remained to build upon....the U.S. Air Force in particular, never developed a capability to conduct a project of this magnitude....MNSTC-I created an entirely new organization, called the Coalition Air Force Transition Team (or CAFTT) to oversee the creation of the Iraqi Air Force. This organization has taken some time to mature....In fact, the CAFTT did not make use of the extensive expertise of U.S. Air Force Special Operations Command forces until 2005." (p. 43, 44, 61)

¹⁷ In March 2013, the U.S. Air Force awarded Embraer the Light Air Support contract for supplying the Afghanistan Air Force twenty A-29 Super Tucanos. At the time of printing, that contract was still under protest by the makers of the AT-6, Beechcraft Corporation. It is estimated that Afghanistan will receive

¹² Joint Publication 5-0, 26 Dec. 2006, p IV-34-37.

The military follows the State Department lead in establishing the necessary conditions for reconstruction in the aftermath of a defeated enemy's decimated organic military capability. The decision to remove nearly all Iraqi military members and start fresh remains one of the most controversial decisions following Operation Iraqi Freedom's initial success. It is the author's belief that U.S. State Department strategy set the stage for violent insurrections and an unstable environment for years to come. In fact, if it hadn't been for the Awakening movement from 2006-2008, it is likely that our exit from Iraq would have been delayed even longer.

¹⁴ *The 21st Century Air Force: Irregular Warfare Strategy*, Irregular Warfare White Paper (Washington, DC: Headquarters, US Air Force, January 2009), https://www.nshq.nato.int/NSTEP/GetFile/?File ID=108&Rank=0.

its first light attack aircraft in 2015, assuming the security situation is amenable.

- ¹⁸ The enormous human toll and suffering in Iraq should give war planners pause the next time an invasion is considered; the argument that "the end justifies the means" suffers from blatant disregard of the current security situation in Iraq. Among others, rising Iranian influence in Iraq is one of the most common indictments of the lack of a coordinated resolution strategy immediately following cessation of major combat operations.
- ¹⁹ United States Embassy-Regional Security Office, "Daily Security Incidents Brief, 17 April 2013," U.S. Department of State Diplomatic Security, Washington, D.C.
- ²⁰ Hock, p. 63.
- ²¹ Paul Smyth, "Airpower and Counterinsurgency, Building on a Proper Foundation," *Air & Space Power Journal*, Volume 25, no. 3, Summer 2011, p. 123.
- ²² This fact is something the author witnessed on the ground, first hand, in both Iraq and Afghanistan during tours there from 2004-2006.
- ²³ "Troops in Contact: Airstrikes and Civilian Deaths in Afghanistan," (New York: Human Rights Watch, September 2008), 13, http://www.hrw.org/sites/default/files/reports/afghanistan0908webwcover_0.pd f.
- ²⁴ Heath Druzin, "US Commander Supports Karzai in Limiting Airstrikes," Stars and Stripes, 17 February 2013, http://www.stripes.com/news/middle-east/afghanistan/us-commander-supports-karzai-in-limiting-airstrikes-1.208389.
- ²⁵ Dr. James Corum, Dean, Baltic Defence College, spoke on this subject at the International Conference for Airpower (ICAP '13), held in Istanbul, Turkey, from 27 March 29 March 2013.
- ²⁶ 2006 RAND study, Air Power in the Counterinsurgency Era, p. xviii.

- Air Force Special Operations Command White Paper, "USAF Irregular Warfare Concept," Col Billy Montgomery, May 2007, p.12. Maj Timothy Murphy (see footnote #2, p. 148) proposes a different approach, integrating all wings with some organic Wing/Group IW expertise. Maj Murphy recommends a three step process to produce the right force: 1) make operational wings responsible for IW and BPC missions, 2) resurrect the light attack aircraft and light mobility aircraft programs, and 3) work toward supplying most of its operational wings with indigenous personnel and light aircraft intended for BPC and IW Missions.
- ²⁸ Conversation between Col Billy Montgomery and Mr. Jerome Klingman, former 6th Special Operations Squadron Director of Strategy and Plans, 14 Dec 06.
- ²⁹ Hock, p. 58.
- ³⁰ Col Russell J. Smith, "Common Sense at the Crossroads," *Air & Space Power Journal*, Volume 26, no. 2, p. 97-98.
- ³¹ Hock, p. 60.
- ³² Also consider the fact that over 800 T-6 training aircraft have been delivered around the world. All USAF, USN, USMC, and Coast Guard pilots train in the T-6, so familiarity with an airframe like the AT-6 light attack aircraft is already built in. Consider also that thousands of NATO pilots have trained in the T-6 at Canada's NATO Flying Training Course at Moose Jaw, Canada. Additionally, Morocco, Mexico, Greece, Iraq, and Israel utilize the T-6 in pilot/navigator training.
- ³³ "Statement of General James N. Mattis, USMC Commander, United States Joint Forces Command before the Senate Armed Services Committee, March 9, 2010," USJFCOM, accessed 15 October 2012, http://www.jfcom.mil/newslink/storyarchive/2010/sp030910.html.
- ³⁴ Email conversation with Lt Col (R) George Monroe, *Comancheros* editor.
- ³⁵ Lt Col Michael W. Pietrucha, "Seeing the Whole Elephant, Envisioning a Successful Light Attack Program for the U.S. Air Force, *Air & Space Power Journal*, Volume 24, no. 3, Fall 2010, p. 54.

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³⁶Study developed by Whitman, Bradley, and Brown (WBB) for Hawker Beechcraft Corporation, 2007.

³⁷ Thomas J. Rath, "Tools of Change, Tactical C4ISR and Conflicts—Past, Present, and Future," Air & Space Power Journal, Volume 25, no. 2, Summer 2011, p. 107. Also, Amy Butler, "Grim Reaper Rate," *Aviation Week and Space Technology* 170, no. 18 (4 May 2009): 24-26.

³⁸ Sandra Erwin, "Air Force Chief: We Will Double the Size of the UAV Fleet," *National Defense*, 6 October 2010, http://www.nationaldefensemagazine.org/blog/Lists/Posts/Post.aspx?List=7c99 6cd7%2Dcbb4%2D4018%2Dbaf8%2D8825eada7aa2&ID=213. Retired Lt Gen David Deptula stated that 200 people are necessary to support one MQ-1 orbit in Operation Enduring Freedom...comments made during ICAP '13, Istanbul, 29 March 2013.

³⁹ Rath, p. 106.

⁴⁰ Rath, p. 107.

⁴¹ Rath, p. 107.

⁴² Discussions with Army aviators at the U.S. Army Aviation Center of Excellence, Fort Rucker, Alabama, 2010. Note that the author was a certified Joint Terminal Attack Controller and A-10 Warthog pilot with operational combat experience in Afghanistan and Iraq.

⁴³ Interviews conducted between Lt Col George Hock and Dr. Wray Johnson (one of the founders of the 6th SOS), September 2009-March 2010.

Wikipedia, 2003 Attack on Karbala, accessed 21 March 2013 at http://en.m.wikipedia.org/wiki/2003_attack_on_Karbala.com

Aichard J. Newman, "Ambush at Najaf," Air Force-Magazine.com, accessed March 2013 at: http://www.airforce-magazine.com/MagazineArchive/Pages/2003/October%202003/1003najaf.aspx

⁴⁶ Pietrucha, p.43. ROVER is a short-range, point-to-point link that enables delivery of video from an airborne electro-optical/infrared sensor to a ground-

unit. ROVER is compatible with the Army's one system remote video terminal (OSRVT).

- ⁴⁷ Conversations with Mr. Derek Hess, Senior Vice President, Beechcraft Defense Company, February 2013. Also, Embraer Super Tucano website, "Built for the Mission," accessed 21 March 2013 at: http://www.builtforthemission.com.
- ⁴⁸ Data based upon AETC computation of maintenance man hours/flight hour, Randolph Air Force Base, Texas.
- ⁴⁹ Embraer Super Tucano website and Air Force Techology.com, "Embraer EMB 314 Super Tucano," accessed 21 March 2013 at http://www.airforce-technology.com/projects/super_tucano/.
- ⁵⁰ Hess, February 2013.
- ⁵¹ Embraer and Air Force Technology.com websites.
- ⁵² Hess and Embraer/Wikipedia websites.
- ⁵³ Hess, February 2013.
- ⁵⁴ Embraer website.
- ⁵⁵ Murphy, p. 155.
- ⁵⁶ Hess, February 2013.
- ⁵⁷ Hess, February 2013 and Pietrucha, "Seeing the Whole Elephant," p.58.
- Noah Shachtman, "Afghan War Hits 3-Year Low," Wired.com website, http://www.wired.com/dangerroom/2012/01/afghan-air-war/.
- ⁵⁹ Carey, Bill, "F-35 Delay Forces \$3 Billion Upgrade Request for U.S. Air Force F-16s,"AIN Online, 4 November 2011, http://www.ainonline.com/aviation-news/ain-defense-perspective/2011-11-04/f-35-delay-forces-3-billion-upgrade-request-us-air-force-F-16s.
- ⁶⁰ Smith, "Common Sense at the Crossroads," p. 92.
- ⁶¹ Smith, "Common Sense at the Crossroads," p. 108.

- ⁶² Office of the Under Secretary of Defense, "Fiscal Year 2012 DoD Fixed Wing and Helicopter Reimbursement Rates," 13 October 2011 Memorandum, "All Other User Rates" column. FY12 figures were augmented with a conservative10% hike for current fuel rates. Figures include costs for fuel, depot-level repairables, and other depot maintenance. AT-6 and A-29 (Super Tucano) open sources served as the basis for their estimates per hour.
- ⁶³ Ben Lambeth, opening comments during keynote address at the 2013 International Air Power Conference in Istanbul, Turkey, 28 March 2013.
- ⁶⁴ Pietrucha, p. 54. In the aftermath of Operation Iraqi Freedom, we have already seen Russia emboldened by our lack of engagement in the light attack arena. In a like manner, China has taken the lead in Pakistan by continuing to offer military assistance and aircraft.
- ⁶⁵ Smyth, p. 125.
- of Action for Enhancing U.S. Air Force 'Irregular Warfare' Capabilities" by Richard Mesic, David E. Thaler, David Ochmanek, and Leon Goodson (RAND), 2) "An Air Commando Solution to an Irregular Warfare Problem" by Col Buck Elton, 3) "OA-X Enabling Concept" by Air Combat Command, 4) "USAF Irregular Warfare Concept" by Col Billy Montgomery, 5) "AT-6—The Best USAF Investment for the Long War" by Maj Brett Blake, 6) "Back to the Basics: An Aviation Solution to Counter-Insurgent Warfare" by Maj Arthur Davis, 7) "The Case for OA-X" by Lt Cols Michael W. Pietrucha and J. David Torres-Laboy, 8) "Cost, Capability, and the Hunt for a Lightweight Ground Attack Aircraft" by Maj Steven J. Tittel, 9) "Irregular Warfare and the US Air Force, The Way Ahead" by Col (R) Robyn Read, 1 Dec 2007, 10) "A Method & Estimate for Counterinsurgency Aircraft Procurement" by Maj David L. Peeler, Jr., 11Apr 2006, and 11) "The Drawdown Asymmetry," by Lt Col Clint "Q" Hinote, *Strategic Studies Quarterly*, Summer 2008.
- ⁶⁷ The F-16C model, for instance, has undergone a service life extension program (SLEP) raising its lifetime hours to 8,000; however, the average F-16C already has nearly 5,500 hours on it. Many F-16 experts believe that the SLEP has added a maximum of 10 more years to the airframe. Conversations with 4,000 hour F-16 pilot Lt Col Will Sparrow, Alabama ANG squadron commander, Aug 2011.

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⁶⁸ Kent Harris and Jennifer Svan, "War Puts Strain on Air Force's Aging Fleet," *Stars and Stripes*, 6 April 2008.

⁶⁹ General Edward A. Rice, Jr., in comments at the Air Education & Training Command Symposium, 12 Jan 2012, San Antonio, Texas.

The Legal Framework of the Use of Armed Force Revisited

By Dr. René Värk*

Introduction

Peoples and states have used armed force against each other throughout history and they have also tried to regulate and restrict the use of force so that there was clarity and predictability. For that reason, the use of armed force is one of the oldest issues in international law and it remains in the midst of political and legal debates due to its complexity and continuing relevance. The contemporary legal framework of the use of armed force was enacted after the Second World War in the United Nations Charter (hereafter the Charter). After the World War states wanted to limit the unilateral use of armed force and to subordinate the use of armed force to the control of the international community, i.e. the Security Council, in order to achieve a better global security environment. These regulations restricting the use of force have contributed to the reduction of inter-state conflicts after the Second World War. Unfortunately, the limits on the use of armed force are not always respected. Although the law itself is reasonably clear and prescribes very limited number of exceptions, states and legal scholars have long proposed additional exceptions in order to further their national interests or to cope with new developments and problems in international relations. Consequently, in many cases, the use of armed force has been in clear violation of international law because the official justifications are based on unsound interpretations of law, or on nothing more than opportunistic positions supported by propagandistic arguments for public consumption, but lacking legal substance.

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This article aims to provide a full analytical overview of the legal framework of the use of armed force in contemporary international law. The article will begin with a brief explanation of how the Charter was drafted and moves to the prohibition of the use of armed force which is the central provision in the Charter. Finally, the article will examine the exceptions to the prohibition of the use of armed force. This article will not explore the Charter from the perspective of cyber warfare which is an issue that calls for a separate article.

United Nations Charter as a Key Instrument

It is the Charter that provides the legal framework for the use of armed force in contemporary international law. The drafting process of the Charter started in August 1944 when delegations from the Republic of China, the Soviet Union, the United Kingdom and the United States started their two-month long deliberations on a future international organisation that would replace the League of Nations. The process continued at San Francisco Conference and culminated with the adoption of the Charter on 26 June 1945.

The United Nations was created in a climate of popular outrage after the unprecedented horrors of the Second World War. The latter had caused more destruction than any previous armed conflict and the impact of the World War pushed national leaders to take steps in order to secure and maintain international peace and security in the future and, "to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind."1 The United Nations' Charter was considered a constitutive document establishing a new order and basic rules for the post-Second World War international community. The first and main purpose of the established organisation was the maintenance of international peace and security.² This was nothing new as the League of Nations, the predecessor of the United Nations, had a similar purpose.3 The regulations in the Charter were built on the experience and achievements taken from the inter-war period. First, the prohibition against resorting to war was first established in the Treaty providing for the Renunciation of War as an Instrument of National Policy (1928) (widely known as the Kellogg-Briand Pact). 4 Secondly, the Charter followed the Stimson doctrine, according to which the international community does not recognise international territorial changes executed by illegal war.⁵ *Third*, the basic model of the collective security system in the Covenant of the League of Nations provided the basis for the more advanced system in the Charter.⁶ The combination and elaboration of these components resulted in the general prohibition of the (aggressive) use of armed force in international relations and creation of an ambitious collective security system.

Prohibitions on the Use of Armed Force

The prohibition on the inter-state use of armed force is a central feature of the Charter and is found in Article 2(4) which proclaims that

All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations.

This provision has been rightfully described "cornerstone of the peace in the [United Nations] Charter" and "the heart of the United Nations Charter" and "the basic rule of contemporary public international law." Never before had nations agreed upon so comprehensive and farreaching prohibition to use armed force. It is hardly an exaggeration to argue that Article 2(4) was one of the most fundamental changes in the system of international relations, which throughout history has valued the freedom of states to wage war. The prohibition to use armed force is essentially accompanied and strengthened by another provision demanding that, "All Members shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered." These fundamental principles of contemporary international law were established to realise the hopes expressed in the Charter, namely international peace and security. They encompassed the primary values and purposes of the inter-state system,

e.g. the protection of state sovereignty and independence and the effective proclamation of international peace and security as the highest objective of the international legal system. The general prohibition for states to use armed force for selfish or supposedly altruistic purposes is not merely to protect the sovereignty and independence of individual states, but to establish an overall order for the entire international community. In a way the Charter declares international peace and security more compelling than inter-state justice, or even human rights for that matter,¹¹ because the use of armed force is not generally considered to be "the appropriate method to monitor or ensure such respect."¹²

The wording of Article 2(4) is a considerable improvement on the previous attempts to outlaw the use of armed force. Yet, at the same time, the wording is still not without ambiguities. Indeed, the structure of the article is complex and almost every phrase or key term is open to dangerously wide interpretations or simply misinterpretations. Although some fundamental deficiencies in the pre-Second World War regulations were addressed and eliminated, Article 2(4) created new aspects that cause confusion even today. However, as the rationale behind the provision in question was to introduce the widest possible prohibition on the use of non-defensive (aggressive) armed force, e.g. to acquire territory or other benefits from other states,¹³ it is intended that we should interpret Article 2(4) in expansive manner.

This article will analyse the essential components of Article 2(4) in the light of state and court practice, and other international instruments in order to establish its generally accepted scope and content although there are, no doubt, states and scholars who advocate unconventional positions. When interpreting the Charter one should not disregard the Friendly Relations Declaration, ¹⁴ a General Assembly resolution clarifying and attempting to progressively develop the Charter. ¹⁵

Who is Bound by the Prohibition?

Article 2(4) is a treaty provision and, as such, was originally legally binding only for the members of the United Nations. As the membership in the United Nations is open to states only¹⁶ the

prohibition to use armed force is addressed to states and only protects states. Article 2(4) protects every state; regardless of whether the states have recognised each other or are even members of the United Nations (the text includes "any state").¹⁷ In case of (terrorist) non-state actors, Article 2(4) becomes relevant only if such actors are acting on behalf of a state, in which case their conduct is attributable to the latter.

However, already for long time, the prohibition to use armed force is considered something more than merely a treaty norm. It rapidly attained the status of customary international law, which is binding upon all subjects of international law including states. Therefore the few states (e.g. Kosovo, Vatican) that are not members of the United Nations are equally forbidden to use armed force in their international relations. The International Court of Justice (hereafter the Court) has confirmed that the prohibition in question exists in customary international law, but has also stressed some aspects. Treaty and customary law on the prohibition to use armed force are not "identical in content" when it comes to exceptions from the rule. But despite some variances in the regulations found in two sources of law, there are no conflicts between treaty and customary law in this area. If we were to simplify a little, customary law reflects the scope and content of Article 2(4).

Additionally, the prohibition to use armed force is also characterised as a peremptory norm of international law (ius cogens norm).23 The latter is defined as "a norm accepted and recognised by the international community of states as a whole as a norm from which no derogation is permitted and which can be modified only by a subsequent norm of general international law having the same character."24 In other words, ius cogens norms represent the overriding norms of international law that must be respected at any time without any excuse (there are no circumstances precluding wrongfulness), e.g. the prohibition of slavery, torture, genocide and the violation of the right of self-determination.²⁵ Such norms may not be evaded by relying on treaty or customary law²⁶ which makes a later treaty relaxing the prohibition to use armed force to be null and void.²⁷ As *ius cogens* norms are essentially similar to customary international law28 they are legally binding on all members of the international community regardless of whether they have expressed their approval or disapproval of a particular norm. While a treaty obligation is owed to other parties of the particular treaty, the obligation under ius cogens norm is owed, as a legal fiction, to the international community as a whole — every state may feel that its essential interests have been breached and consequently not only the state that is directly injured, but also any other state, is entitled to invoke the responsibility of the violating state.²⁹

What Does "Force" Include?

Article 2(4) is certainly progressive because it talks about the use of "force" and not "war." The latter refers to a narrow and technical legal situation which begins with a declaration of war or rejection of an ultimatum and ends with a negotiated peace treaty.³⁰ According to the doctrine developed since the beginning of the 19th century, a state of war did not depend on the existence of objective circumstances, i.e. hostilities between states, but on the willingness of states to classify the situation as a war.31 The latter was generally prohibited before the Second World War but states found ways to by-pass the prohibition.³² The Kellogg-Briand Pact reads that states "condemn recourse to war for the solution of international controversies and renounce it as an instrument of national policy in their relations with one another."33 Perhaps the most famous case is when Japan invaded Manchuria in 1931. Japan did not declare war against China and therefore claimed that its military operations did not amount to war and were not in violation of international law. In fact, Japan's actions were war in reality, but not war in legal terms and, consequently, beyond the scope of the Kellogg-Briand Pact.

Due to the disgraceful practice of the 1930s the drafters of the Charter decided to replace the term "war" with the term "force," which takes into account the factual reality and covers all forms of hostilities, both declared wars and armed confrontations falling short of an official state of war, but which may actually range from minor border clashes to extensive military operations.³⁴ Formalistic excuses, such as classifying a military operation a police raid or border incident (euphemisms also used by Japan), do not help the state to escape the prohibition in Article 2(4). What matters for the latter is the actual use of armed force.

If one reads the provision carefully one sees that it talks "force," not "armed force." This provoked a discussion on what kind of force is actually prohibited by Article 2(4). The prevailing, and certainly correct, view is that in this context the term "force" is limited to armed force and it does not include, for example, political or economic coercion.³⁵ In the 1950-1960s the developing and socialist states argued that "force" also covers non-military force such as political coercion (e.g. refusing to accept some treaty or breaching diplomatic relations) and especially economic coercion (e.g. imposing restrictions on commerce or arresting assets).³⁶ These arguments are not persuasive for several reasons. *First*, when Brazil made a proposal at San Francisco Conference to include "economic measures" in Article 2(4), it was explicitly rejected.³⁷ Banning non-military means of pressure leads to situation where states have left with no means to influence states that, for example, are violating the rights and interests of other states. Secondly, the Friendly Relations Declaration has derived several clarifying principles from Article 2(4) and these essentially involve the use of armed force.³⁸ Third, the Definition of Aggression adopted by the General Assembly uses the wording of Article 2(4) and adds the word "armed" before the word "force."39

What Does "International Relations" Stand for?

Article 2(4) demands that states must refrain from the use of armed force "in their international relations." This refers to inter-state relations and leaves inner-state relations outside the scope of Article 2(4). Recalling the general principle that the Charter ought not to intervene in internal affairs of any state, 40 civil wars are consequently not prohibited — insurgents may start a revolution and governments may use armed force against them. The situation supposedly changes if the insurgents are able to establish a *de facto* regime controlling certain territory, exercising some governmental authority, and preferably also enjoying international recognition (e.g. the Libyan rebels in 2011).⁴¹ However, this can lead to strange outcomes. For example, if a secessionist movement is successful enough to take control of some territory and declare independence, but the territorial state is not able to regain control and the international community does not recognise the new "state," the

situation becomes a frozen conflict. The longer this conflict lasts the more likely the unrecognised state will gain the protection of Article 2(4). This means that the international community now expects the territorial state to use non-military means to end the conflict, and its position is strengthened over time, e.g. Abkhazia.

However, states do not violate the "international relations" requirement if they conduct military operations in other states if the latter have issued an appropriate invitation. Every sovereign state is free to decide how to make use of its territory, and if necessary, it may invite other states and even allow them to use armed force,⁴² e.g. when the Security Council authorisation expired, Afghanistan and Iraq issued an invitation to the Coalition forces. However, it is always a possibility that the invitation is not genuine, either because it was fabricated by the intervening state or was issues by a rebel group. The Soviet Union justified its invasion to Afghanistan in 1979 also by an invitation from the Afghan government, but in reality the invitation was issued only after the invasion and by the Soviet installed government (composed of former anti-government forces).⁴³

While collective operations against (terrorist) non-state actors or pirates are politically less sensitive and happen frequently, states and scholars have conflicting views on whether states should intervene in classic civil wars where internal political struggle is taking place between different fractions. The classical, and probably still prevailing, view is that other states may intervene by the invitation and on the side of the government in power. But if insurgents have established control over some territory and exercise some governmental authority it becomes difficult to decide who is the legitimate representative of the state and who is therefore authorised to issue the invitation. Moreover, some states might recognise the existing government and other states may have shifted their recognition to the insurgents, e.g. Bashar al-Assad regime versus Syrian National Council in the Syrian civil war. The alternative, and rather sensible, view is that no-one should intervene in civil wars as they are internal affairs. By intervening on either side other states affect the "natural" outcome of internal, although violent, political struggle. But the situation changes and the international community should get interested if the parties are disregarding international law in their struggle and commit international crimes. To conclude, because states intervene in civil wars by an invitation their action is not in violation of Article 2(4), although other rules of international law are applicable when assessing the validity of the invitation.

Is the Prohibition Conditional?

The prohibition to use armed force in Article 2(4) is followed by a phrase "against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations." Does this mean that the prohibition is conditional and armed force may be used for a variety of purposes if it is not aimed "against the territorial integrity or political independence of any State," e.g. in-and-out surgical anti-terrorism military operations? This argument has provided justification for humanitarian and pro-democratic interventions and other "altruistic" forms of military operations. Anthony D'Amato, a well-known representative of the school of restrictive interpretation, has argued that the territorial integrity requirement is violated only if the state permanently loses a portion of its territory.⁴⁴

However, these clauses were never intended to restrict the prohibition to use armed force but were seen by the drafters as the most obvious examples of what is prohibited.⁴⁵ The initial Dumbarton Oaks Proposals for the Establishment of a General International Organization stated simply that, "All members of the Organization shall refrain in their international relations from the threat or use of force in any manner inconsistent with the purposes of the Organization."46 The clauses were added at San Francisco Conference at the insistence of smaller states who wanted a particular emphasis on those vital aspects.⁴⁷ Considering the travaux préparatoires of the Charter, it is not possible to claim that the prohibition to use armed force is limited to these restrictive circumstances. This position has been supported by the Court in the Corfu Channel case where the United Kingdom argued that it had a right to intervene and sweep the minefield in Albania's territorial waters, which were a part of the state's territory, in order to guarantee the right of innocent passage. The Court considered such activity a "manifestation of a policy of force, such as has, in the past, given rise to most serious abuses and such as cannot ... find a place in international law" and emphasised that "respect for territorial sovereignty is an essential foundation of international relations." Therefore, an incursion into another state's territory constitutes an infringement of Article 2(4), even if it is not intended to deprive that state of its territory, and the word "integrity" actually ought to be read as "inviolability."

Furthermore, the clauses "territorial integrity" and "political independence" should not distract attention from third clause, "any other manner inconsistent with the Purposes of the United Nations." The latter acts as a "safety net" that covers all uses of armed force that do not fall explicitly under first two clauses. The paramount and overriding purpose of the United Nations is to maintain international peace and security and, to that end, to prevent and remove threats to peace and suppress aggression in its different forms.⁴⁹ Indeed, every single use of armed force, even a precision attack against a terrorist nonstate actor, can potentially endanger the precious and often unstable international peace and security. The decisions to intervene are often based on the opinion and understanding of one or some states, not on the general consensus of the international community. State practice indicates, unfortunately, that the true reasons for intervention are usually egoistic rather than altruistic and tend to further political or economic interests of the intervening states. The preamble of the Charter underlines that "armed force shall not be used, save in the common interest." The Charter is a universal agreement that, in the words of Louis Henkin, sends a message that "even justified grievances and a sincere concerns for 'national security' or other 'vital interests' would not warrant any nation's initiating war."50 To conclude, the prohibition to use armed force is not conditional, but general.⁵¹

What Amounts to "Threat of Force"?

The prohibition of threatening with armed force has received much less attention than other elements of Article 2(4).⁵² It is not easy to answer what the term "threatening" covers. International judicial organs have not decided a single case about the threat of force in the sense of Article 2(4) because states have not filed any complaints. But one should not

conclude that states have not threatened others with armed force. On the contrary, but threats are usually followed by actual military operations and therefore the situations are discussed as violations of the prohibition to use armed force. The threat and use of armed force are actually two distinct violations, but states pay more attention to uses and judicial organs seem to have a practical approach that "more serious" conduct (use of armed force) covers "less serious" conduct (threat of armed force). Article 39 regulating the conduct of the Security Council also differentiates between "threat to the peace" (includes the threat of armed force), and "breach of the peace" and "act of aggression" (includes the use of armed force). The prohibition to threaten with armed force is separately mentioned also in other international instruments.⁵³

States are surprisingly resistant and tolerant to the threats of armed force. The latter is essential and inevitable part of the system of international relations and fulfils certain functions.⁵⁴ We can find such threats regularly in the media and they receive far less attention than actual armed attacks. But such power games must have boundaries in order for the prohibition to threaten with armed force to have meaning.

The arming, forming alliances and in other ways building self-defence capability are not a violation of Article 2(4). It is certainly difficult, if not impossible, to distinguish between the arming for defensive or offensive purposes. In the *Legality of the Threat and Use of Nuclear Weapons* advisory opinion the Court found that the possession of nuclear weapons (the same logic applies of all weapons) in itself does not amount to the violation of Article 2(4), unless the particular state intends to direct them directly against the territorial integrity or political independence of a state, or against the purposes of the United Nations or whether, "in the event that it were intended as a means of defence, it would necessarily violate the principles of necessity and proportionality."55

The Court emphasised that there is a close connection between a "threat" and a "use," i.e. the legality of the threat depends directly on the legality of the intended use. ⁵⁶ If a state or an alliance sends the potential aggressor a message that armed force will be used repel its armed attack, this is legal because the state or the alliance is "threatening" with legitimate self-defence. But if a state demands that another state handed over a part of its territory and adds that it is prepared to use armed force

if the other state is not willing to comply, the state is threatening with an illegal form of armed force and is violating Article 2(4). In practice, it is difficult to draw a line between threats and uses. In the *Military and Paramilitary Activities in and against Nicaragua* case the Court was not convinced that the military manoeuvres held by the United States near the Nicaraguan borders were threats of armed force.⁵⁷ But the United Kingdom found in the Security Council that when Iraqi artillery and tanks were deployed in positions pointing towards and within range of Kuwait with ammunition at the ready, Iraq's action was a threat to Kuwait and in breach of Article 2(4).⁵⁸

Exceptions to the Prohibition

As with every rule the prohibition to use armed force is not without exceptions. Although certain states and legal scholars have advocated several potentially questionable justifications for the lawful use of armed force, only two explicit exceptions exist in the Charter: (1) individual and collective self-defence, and (2) military enforcement measures authorised by the Security Council.⁵⁹ Armed reprisals, i.e. military reactions to the other breached of international law, are forbidden under the Charter.⁶⁰

Self-Defence

States have an inherent right to self-defence. This mantra has been repeated countless times but it is still important to emphasise that self-defence has a clear meaning in international law. It can sometimes have very little connection with the not-so-rare emotional and political declarations by states that they have the right to defend themselves against various "inconveniences." Self-defence in international law refers to the right to use armed force against an attack involving a significant amount of armed force. There is no doubt that self-defence is permissible if the armed attack was carried out by a state. Do states have similar rights if an attack is organised by a non-state actor? Opinions differ on this matter, but it would be unreasonable to argue that self-defence should be ruled out under any circumstances.

All legal instruments which have restricted or prohibited the use of armed force have explicitly or implicitly recognised the right to self-defence.⁶¹ Similarly, Article 51 of the Charter did not establish, but simply recognised, that right and provides that

Nothing in the present Charter shall impair the inherent right of individual or collective self-defence if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defence shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security.

Self-defence has generally been associated with inter-state relations, but after the events of 11 September 2001 it is necessary to ask whether the concept of self-defence can also include non-state actors. Article 51 does not itself specify that the right to self-defence only applies between states. This condition has been taken as implicit because self-defence is an exception to the general prohibition to use force, and Article 2(4), which contains that prohibition, speaks about states. Nonetheless, there is no reason why the right to self-defence should only be confined to inter-state relations because the violent acts by non-state actors can at times be comparable to those of states.

Definition of "Armed Attack"

Article 51 asserts explicitly that states can lawfully exercise self-defence "if an armed attack occurs." The term "armed attack" was left undefined at the San Francisco Conference because it was considered

self-evident and sufficiently clear.⁶³ However, this was a too optimistic judgment to make because it soon proved to be rather difficult to agree on a standard definition of "armed attack" as some nations preferred restrictive and others a liberal interpretation of Article 51. The Court has asserted that it is necessary to distinguish the gravest forms of armed force (those constituting armed attack) from other less grave forms.⁶⁴ However, it does not explain which criteria should be used for making that distinction. It seems that the Court assesses the quantitative amount of armed force because it refers to "scale and effect," distinguishing armed attacks from mere frontier incidents. To some extent, the Court has a point — a single shot across the border is technically a use of armed force and violation of Article 2(4), but it should not initiate selfdefence. States should have a "thick skin" and limit their reaction to non-military measures in case of insignificant use of armed force. But as was noted by Sir Gerald Fitzmaurice, "there are frontier incidents and frontier incidents; some are trivial, some may be extremely grave."65 What may seem a minor border incident to Israel might appear to be an armed attack to Estonia. But, in the end, it is dangerous to exclude "small" armed attacks from "genuine" armed attacks. Such a distinction seems artificial and is difficult to apply during or immediately after the attack. It is more reasonable to say that the quantitative extent of armed force simply limits the choice of counter-measures on the basis of proportionality.

The Court has tried to mitigate the exclusion of the less grave forms of armed force by suggesting that separate but connected attacks could cumulatively constitute an armed attack.⁶⁶ This was a surprising move because states and legal scholars have long been sceptical about the theory of accumulative events,⁶⁷ and the Security Council has for years denied such a possibility⁶⁸. This theory may seem an appealing option, but it is full of uncertainties, e.g. who authoritatively assesses this accumulation and over what time period must this accumulation take place?

Can a non-state attack amount to an armed attack for the purposes of Article 51? If an attack by a non-state actor is comparable by scale and effect to an attack by regular armed forces it would be unreasonable to claim that no armed attack was carried out in the sense of Article 51. This is supported by the Definition of Aggression adopted by the

General Assembly that qualifies any act of aggression as, "the sending by or on behalf of a State of armed bands, groups, irregulars or mercenaries, which carry out acts of armed force against another state of such gravity as to amount to the acts listed above, or its substantial involvement therein."⁶⁹

Can non-state actors commit an armed attack for the purposes of Article 51? Traditional interpretation would say no, but the situation has changed since 11 September 2001 and subsequent state practice would suggest that it could be. Article 51 does not provide that the right to selfdefence is only applicable if an armed attack originates from a state. Why should this right depend on the type of attacker? The Court has acknowledged this possibility, but makes it conditional on whether the attack is eventually attributable to a state (the latter is eventually responsible for the conduct of the non-state actor).⁷⁰ The infamous Caroline case that has long been taken as an authoritative source for the criteria of self-defence was about self-defence against a non-state actor (the British forces acted against a group of Americans who provided cross-border support to the Canadians who rebelled against the British).⁷¹ Immediately after the 11 September 2001 attacks, the Security Council,⁷² NATO⁷³ and the Organization of American Sates⁷⁴ explicitly confirmed the right to self-defence in the wake of these attacks — a position that was at least implicitly supported by the rest of the international community. True, reaffirmations of self-defence were found in the preamble of the Security Council's resolutions, but this fact does not render these reaffirmations meaningless.

Anticipatory Self-Defence

Although Article 51 provides that states may exercise self-defence "if an armed attack occurs" there is still the debate about whether states may resort to self-defence also before an actual armed attack has occurred (anticipatory self-defence). According to most legal doctrines, the term "armed attack" refers to an actual armed attack. This is certainly the position under the Charter.⁷⁵ The intent of the drafters and the purpose of the Charter was to minimise the unilateral use of armed force and to draw a line at the precise point of an armed attack — an event the

occurrence of which could be objectively established — which served the purpose of eliminating uncertainties.⁷⁶ There is hardly any reason to suggest that the plain language of Article 51 does not convey precisely the meaning that was intended — actual armed attack. States seem to share that conclusion because when they claim anticipatory self-defence they do not refer to Article 51, but make vague references to the inherent right of self-defence.

Hence, any counter argument must be based on customary law. Those in favour of anticipatory self-defence believe that the Charter has left previous, more relaxed, customary international law intact because Article 51 pledges that, "nothing in the [United Nations] Charter shall impair the inherent right of ... self-defence." Anticipatory self-defence was recognised in customary international law predating the Charter, but it is certainly not obvious that such a permissive rule has survived the adoption of the Charter. Although we cannot dismiss the fact that after 11 September 2001 more states and legal scholars have expressed willingness to accept a very narrowly circumscribed anticipatory self-defence.⁷⁷ The Court has persistently dodged the question as to whether anticipatory self-defence is permissible.⁷⁸

Anticipatory self-defence takes two forms:⁷⁹

- Pre-emptive self-defence military action taken against an imminent attack;
- Preventive self-defence military action taken against a threat that has not yet materialised and that is uncertain or remote in time.

Pre-emptive Self-Defence

Pre-emptive self-defence has positive and negative aspects, but the latter prevail. The alleged imminence of an armed attack cannot usually be assessed by objective criteria, therefore any decision to take pre-emptive action would necessarily be left to the discretion of the state in question.

Such discretion involves a noteworthy potential of error which may have devastating results and a manifest risk of abuse, which can in turn seriously undermine the prohibition to use armed force. Moreover, the argument that an armed attack begins with planning, organisation and logistical preparation is not very persuasive, otherwise the armed attack would begin with pencil and paper rather than with bullets and bombs.

The proponents of pre-emptive self-defence refer to the famous *Caroline* incident. The 1837 rebellion in Canada, then a British colony, found active support from American volunteers and private suppliers operating out of the border region in the United States. The steamship *Caroline* was involved in the supply of both men and materials to the rebel-occupied Navy Island in the Niagara River, which served as a base for the volunteers. The United States government knew about these activities, but did little to prevent them. The British forces had information that the Caroline was about to bring new supplies and the British forces crossed the border to the United States, seized the *Caroline*, set her on fire and cast the vessel adrift so that she fell to her destruction over Niagara Falls. Two citizens of the United States were shot dead aboard the *Caroline*, and one British officer was arrested and charged with murder and arson.⁸⁰

The British government justified its action as necessary for self-defence and self-preservation since the United States did not hinder the threatening activities originating from its territory. The British also cited the perceived future threats posed by the operations of the *Caroline*. The reply of the United States Secretary of State Daniel Webster to the British Government has long been regarded as a definitive statement of the right of self-defence in international law.⁸¹ Webster recognised that the right of self-defence did not depend upon the United Kingdom having already been the subject of an armed attack and accepted that there was a right of pre-emptive self-defence in the face of a threatening armed attack, provided that there was "a necessity of self-defence, instant, overwhelming, leaving no choice of means and no moment for deliberation." The Webster formula has since then been frequently used by the proponents of pre-emptive self-defence.

Since 1945, only few states have invoked pre-emptive self-defence and only some additional states have "accepted" the doctrine by not actively criticising the states which have used such self-defence. For example, in

1967 there was a remarkable assembly of armed forces in the Sinai Peninsula near the southern frontier of Israel. When the United Nations peacekeeping forces were withdrawn from the buffer-zone between two states, Israel launched airstrikes against Egypt claiming that it had right to pre-emptive self-defence as the Egyptian forces had been deployed as part of an impending armed attack.⁸³ However, in the Security Council other states saw Israel's first strike as a clear proof that Israel was the aggressor, not Egypt and Syria, and even the delegations that were more sympathetic towards Israel (the United Kingdom and the United States), refrained from any discussion about the permissibility of pre-emptive self-defence.⁸⁴

However, an armed attack may be so imminent and certain (it is not a question of *if*, but *when*) that it would be unreasonable to demand that the soon-to-be victim state should wait until the moment when the first missiles hit their targets. Even though the author does not support the general right to pre-emptive self-defence, if a state or non-state actor has taken decisive and irreversible steps to begin an actual armed attack the targeted state may use interceptive self-defence. These are exceptional cases. A sound mind would not require that the state waits for an inevitable attack to happen before acting. The Charter should not become a suicide pact.

Preventive Self-Defence

In September 2002, President George W. Bush submitted to the Congress a report on the national security strategy that asserted, among other things, an evolving right to use force preventively (despite using the word "preemptive," the strategy is actually talking about preventive self-defence) against the threat originating from the "rogue states" and terrorists possessing weapons of mass destruction.⁸⁶ The report claims that⁸⁷

The United States has long maintained the option of preemptive actions to counter a sufficient threat to our national security. The greater the threat, the greater is the risk of inaction — and the more compelling the case for taking anticipatory action to defend ourselves, even if uncertainty remains as to the time and place of the enemy's attack. To

forestall or prevent such hostile acts by our adversaries, the United States will, if necessary, act preemptively.

The United States will not use force in all cases to preempt emerging threats, nor should nations use preemption as a pretext for aggression. Yet in an age where the enemies of civilization openly and actively seek the world's most destructive technologies, the United States cannot remain idle while dangers gather.

This statement sparked a hot debate among governments and legal scholars. Although preventive self-defence was accepted or even adopted by some states (e.g. Australia, Japan, France India, Iran), the "Bush doctrine" was overwhelmingly criticised. In fact, the United States narrowed its claims somewhat later.⁸⁸

Preventive self-defence is clearly unlawful under international law. There is nothing in contemporary legal norms and general state or court practice that would suggest that such a broad, even overly broad, construction of an armed attack is a part of current customary law.89 Such a precautionary approach would be alarming, undesirable and wideopen to mistakes or abuse, and it is difficult to understand how this would contribute to global stability and ensuring international peace and security. The proponents are perhaps inspired by (international) environmental law which requires that if there may be negative effects one has to take precautionary measures, 90 e.g. if a state is building a hydro-plant on a river and there are indications that the project may have harmful effect on the environment a state has to act to avoid negative effects. Now, if one would apply the same principle to self-defence, the rule would read "in the case of uncertainty, strike." States simply may not use armed force when an armed attack is merely a hypothetical possibility.91

In 1981, Israel exercised preventive self-defence when it attacked a nuclear reactor in Iraq. ⁹² Israel explained in public statements and in the Security Council that it had been forced to defend itself against the dangers arising from the construction of a nuclear reactor in Iraq — once operational, the reactor could contribute to the development of nuclear weapons, which Iraq would not hesitate to use against Israel. The latter argued that the nuclear reactor was to become a critical problem in a matter of weeks and it decided to strike before the nuclear reactor became an immediate and greater menace to Israel. So, Israel did not

react to an actual armed attack, but instead to a potential and still remote threat. All members of the Security Council disagreed with the Israeli interpretation of Article 51 and supported without reservation the resolution that condemned, "the military attack by Israel in clear violation of the Charter of the United Nations and the norms of international conduct."⁹³ True, the Security Council did not reject preventive self-defence as such, but more likely concluded that Israel failed to demonstrate the imminence of an armed attack from Iraq.⁹⁴

Criteria for Exercising Self-Defence

Self-defence has to be immediate, necessary and proportional. These well-known criteria are also applicable if self-defence is exercised against non-state actors. However, there are a few nuances that should be taken into consideration. Overall, some flexibility is necessary in order not to render self-defence a mere theoretical option.⁹⁵

When states react in self-defence it must happen immediately and without undue delay after the armed attack — otherwise the military operation is simply an armed reprisal. When is immediate, when is late? To begin with, we cannot compare personal self-defence in national law to state self-defence in international law. Depending on circumstances it may take hours or even days before a state is ready to exercise selfdefence. During the Falklands War several states accused the United Kingdom of disregarding the immediacy requirement because the first British units reached the islands in about three weeks. 96 But the critics failed to take into account the geographical aspect — the Falkland Islands were almost 12,700 kilometres from the British Isles which made this "delay" reasonable. The geographical origin of the attacks carried out by (terrorist) non-state actors is not immediately known, as is usually the case in inter-state conflicts. For that reason, gathering information and identifying the perpetrators (somewhere abroad) prolongs the reasonable time period between the armed attack and the implementation of self-defence.

The criterion of necessity demands that there be no feasible alternative to the use of armed force. It is reasonable to ask the state to consider peaceful means of settling disputes if the armed attack was an isolated or insignificant episode. But in the event of an extensive attack the state may use armed force more freely as a first resort.⁹⁷ A judgment on necessity is certainly subjective, but this subjectivity does not equate to wanton discretion.

Assessing proportionality is not an exact science either. The best results are achieved after conflicts have ceased when it is possible to calmly and comprehensively evaluate the circumstances. The purpose of self-defence is to repel and end the attack, but this does not mean that the military operation must stop at the border, 98 although this does not justify the full occupation of the state either. Regrettably, proportionality is not the definitive criterion for assessing the legality of the armed force used in self-defence. The armed conflict may escalate (the aggressor renews its offensive operations) and in the end, the use of armed force reaches the level which is disproportional to the initial attack. Once war is raging the exercise of self-defence may bring about the destruction of the aggressor's armed forces. 99

Collective Self-Defence

States may collectively exercise a right that they may also individually exercise. Collective self-defence has received surprisingly little attention. Most principles and criteria are equally applicable in both cases, but collective self-defence is more complex than individual self-defence and deserves closer examination.

First, exercising collective self-defence requires that (1) a state identifies itself as the victim of an armed attack 100 and (2) a state issues a request for assistance. 101 The first requirement is implicitly applicable also in the event of individual self-defence and indicates that there was an armed attack that triggered the right to self-defence. The second requirement is supposed to prevent situations where other states intervene against the will of the victim state. Without this requirement an armed attack can become an excuse to intervene in other states for less honourable reasons. After 11 September 2001 the United States informed the Security Council that it was the victim of armed attacks and from 7 October 2001 they would be exercising individual and collective self-

defence in Afghanistan.¹⁰² This opened the way for collective self-defence and for the participation of other states.

Secondly, collective self-defence is exercised for the benefit of the victim state (no need for some degree of "self").¹⁰³ Therefore the range of appropriate participants is not limited to those who were victims along with the state issuing a request for assistance. This is most reasonable and better maintains international peace and security: a potential aggressor has to consider the possibility that all states may, from the moment of the first armed attack, participate in a multinational military operation against it (spontaneously or under a prior agreement¹⁰⁴). The United Kingdom was not a direct victim of the 11 September 2001 attacks (Article 5 of the Washington Treaty creates a legal fiction that all members of NATO were victims of these attacks), but was entitled to participate in collective self-defence with the United States.

Role of the Security Council

The drafters of the Charter considered the right of self-defence a temporary right that a state may exercise "until the Security Council has taken measures necessary to maintain international peace and security" — states had to resist the aggressor until the international community took over. This idealism remained on paper, but it does not mean that provisions concerning the role of the Security Council in connection with self-defence are completely meaningless.

States are obliged to inform the Security Council immediately of the measures taken in the exercise of self-defence. This is necessary so that the Security Council, who has "primary responsibility for the maintenance of international peace and security," 105 is aware of what is happening in the world and why states are using armed force. What happens if a state fails to respect this obligation? This is a procedural obligation and failure to observe it does not affect the legality of self-defence. 106 But at the same time, "the absence of a report may be one of the factors indicating whether the state in question was itself convinced that it was acting in self-defence." 107

The measures taken by states do not affect in any way the authority and responsibility of the Security Council to take at any time such action as it

deems necessary in order to maintain or restore international peace and security. The Security Council has competency to evaluate whether states are exercising legitimate self-defence, e.g. when South Africa intervened militarily in Angola (1966–1989), the Security Council repeatedly rejected the former's arguments that its military operations were self-defence. 108 Equally, the Security Council may decide that it takes over the responsibility for resolving the situation. As mentioned above, the right of self-defence is terminated or at least suspended when the Security Council takes necessary measures. But what can one expect from the Security Council? Is it enough if the Security Council demands that the parties to the conflict cease hostilities or imposes economic sanctions that have no effect on the aggressor? There is no consensus about this among states. While non-victim states are ready to accept modest measures, 109 victim states have emphasised that they are ready to relinquish their right to self-defence only if the Security Council is effectively handling the conflict.¹¹⁰ Indeed, we cannot expect the states to give up their inherent right of self-defence if the Security Council does not provide alternative measures of comparable or better effect.

Military Enforcement Measures

The collective security system is based on the postulate that an institution representing the international community may take an authoritative decision to use enforcement measures against a member of the international community that has committed an aggression or other violations of international law. The contemporary collective security system is headed by the Security Council upon whom states have conferred "primary responsibility for the maintenance of international peace and security."¹¹¹ Although it is composed of only 15 member states¹¹² the Security Council acts on behalf of all member states when carrying out its duties in connection with maintenance of international peace and security. Despite being a political organ whose decisions are, and also have every right to be, linked to political motivations not necessarily congruent with legal considerations, the Security Council's actions have legal consequences. It is the one organ of the United

Nations that can impose legally binding obligations and non-military or military sanctions on the member states.¹¹⁴

The Security Council, a constantly attentive executive organ, has a broad range of considerable means at its disposal under Chapter VII of the Charter to fulfil its responsibility, starting with diplomatic or economic sanctions¹¹⁵ and ending with military measures.¹¹⁶ These are often called collective enforcement measures.

Determination of a Situation

The Security Council cannot employ enforcement measures at any given moment. It is supposed to follow certain procedures in order to establish that conditions for the use of such measures are satisfied — the primary condition is the existence of a threat to the peace, a breach of the peace, or an act of aggression.¹¹⁷ Once a positive determination has been made, the door is automatically opened to enforcement measures of a nonmilitary or military nature. Nevertheless, this is a procedural rather than substantive limitation, basically demanding that the Security Council as a collective organ reaches a consensus before imposing enforcement measures. Yet such a limitation may equally help to ensure consistency in the Security Council's practices if this determination is not made on the basis of political expediency but after a genuine assessment of the situation and comparison of the latter with other similar situations. The practice shows that the Security Council has not always explicitly determined that a threat to the peace, a breach of the peace, or an act of aggression existed before imposing sanctions.¹¹⁸ In such cases we have to assume an implied determination. A few observations are called for. First, there is no need to expressly refer to Article 39 when making such a determination. 119 Secondly, a determination is not necessary in cases of resolutions that follow from previous connected resolutions that did contain a determination. 120 Third, in terms of time the validity of such a determination does not expire automatically — it remains valid until the Security Council decides otherwise, even if there is a change in the situation on the ground.

The discretionary power of the Security Council is very broad in terms of deciding both *when* and *how* to act. At the San Francisco Conference

various proposals were made that the regulations should be more detailed with regard to the collective security system but, in the end, the present wording was preferred. It was expressly stated that the lack of more specific criteria was necessary if the Security Council were to be allowed to decide how to act on a case-by-case basis. ¹²¹ A determination is essentially a judgment based on factual findings and the weighing up of political considerations that cannot be measured by legal criteria. The former usually prevails. The political nature of determinations is further underlined by the fact that permanent members of the Security Council have the power of veto. ¹²² Nonetheless, once it has made a determination this determination is conclusive and all member states must accept the Security Council's verdict even if they do not share its opinion. The Security Council is theoretically obliged to make a determination and subsequently take any enforcement measures. But in reality it operates selectively and with much discretion. ¹²³

The "threat to peace" is the most flexible and dynamic of the three terms in Article 39 and it is here that the Security Council enjoys the broadest discretion. It is equally true that within this discretion lies the possibility of subjective political judgments. In fact, we can conclude rather bluntly that a threat to the peace is whatever the Security Council says is a threat to the peace. Obviously, here one should distinguish such discretion from the necessity to sufficiently explain to states the characteristics of a specific threat to the peace. While this may not be necessary in the event of more traditional threats (e.g. preparing an armed attack against a state), it may well be vital if the Security Council is referencing a continuous state of affairs (e.g. the inability to demonstrate the denunciation of terrorism) or an abstract phenomenon (e.g. terrorism). A threat to the peace does not have to be linked to any breach of international law. In other words, a threat to the peace is not necessarily a state of facts, it can merely be a state of mind; and the mind that counts is that of the Security Council. When examining Security Council practice, one notices that very different situations may qualify as a threat to the peace, e.g. non-international armed conflicts, 124 serious violations of human rights, 125 violations of the democratic principle, 126 violations of the law of armed conflict, 127 terrorism128 as well as the proliferation of nuclear, chemical and biological weapons¹²⁹.

If we were to simplify a little, the "breach of the peace" is mostly manifested in the form of an armed attack. The Security Council has never determined that a situation is an "act of aggression" (apparently too strong term for politicians) so there is no precedent to comment on.

Authorising the Use of Armed Force

Once the situation is determined to constitute a threat to the peace, a breach of the peace, or an act of aggression, the Security Council may authorise measures it deems necessary to maintain or restore international peace and security. Relevant decisions depend on the existence of political consensus among the member states in the Security Council (most importantly among the permanent members), which means that authorisations are not necessarily easy to obtain. During the Cold War the system was basically dead-locked and the Security Council did not fully employ the collective security system. In the Korean War the Security Council did determine that the situation constituted a breach of the peace, but did not authorise use of armed force (it recommended that states provided military forces and other assistance, which looked more like an exercise of collective self-defence). 130

Ideally, the Security Council should start with non-military measures under Article 41, but if the Security Council considers that such measures would be inadequate or have proved to be inadequate it may straightaway authorise military measures. Article 42 gives the Security Council the right, "to take such action by air, sea, or land forces as may be necessary to maintain or restore international peace and security." The Security Council does not use such cumbersome wording, but it has adopted a practice of authorising "all means necessary" or "all necessary measures," which logically include the use of armed force. 131 The authorisation are often accompanied with conditions, e.g. in 2011, the Security Council authorised states, "to take all necessary measures ... to protect civilians and civilian populated areas under threat of attack in the Libyan Arab Jamahiriya, including Benghazi, while excluding a foreign occupation force of any form on any part of Libyan territory."132 States (in reality NATO) were allowed to use armed force only to protect civilians and civilian populated areas (no engagement with Libyan armed

forces for other purposes) and were effectively required to employ air force or navy forces for their operations (no ground forces).

Some further explanations are needed. First, the Security Council is not in command of United Nations standing armed forces, although they were foreseen in the Charter. 133 Therefore the Security Council relies on the hope that there are states, which for some reason wish to participate in collective military operations. The Security Council may not compel states contribute armed forces — the authorisation is more of a recommendation or justification, not a command, to use armed force. 134 Secondly, the authorisation is often executed by a regional organisation, e.g. NATO.¹³⁵ The Charter actually encourages the Security Council to utilise, "regional arrangements or agencies for enforcement action under its authority."136 It should be noted that although the Charter recognises the importance of regional organisations and their involvement resolving conflicts, such organisation do not have the right to authorise the use of armed force — they may only act according to the authorisation given by the Security Council. 137 Third, the determination of a situation as a threat to the peace, a breach of the peace, or an act of aggression is not enough. The Security Council must issue a separate and explicit authorisation to use armed force. When the NATO started its bombing campaign in the Federal Republic of Yugoslavia in March 1999, they claimed that they had an implicit authorisation to use armed force¹³⁸ because the Security Council had twice determined that the situation in Kosovo constituted a threat to peace and security in the region. 139 But such determinations are not enough. No state or regional organisation has the right to guess what the Security Council had in mind when the resolution was adopted or what the Security Council might do in the future. Fourth, the target state is barred from legally invoking the right of self-defence and later claim reparations for damage caused during the collective security system operations. Fifth, states that find themselves confronted with special economic problems arising from carrying out the enforcement measures may consult with the Security Council to find a solution of those problems.¹⁴⁰ The practice has been unsatisfactory.¹⁴¹ During the Iraq-Kuwait conflict numerous states applied for assistance, but no state was exempted from participation in the sanctions although states were promised assistance from the international community. 142 Jordan, for

example, resumed its oil imports from Iraq due to unsatisfactory reaction from the United Nations.

Conclusion

The United Nations Charter is still a valid and relevant instrument to assess the legality of the use of armed force. The conservative interpretations of its provisions have significantly contributed to a better global security environment. Article 2(4) enacts a general prohibition to use armed force for aggressive purposes and the prohibition is not limited to uses against the territorial integrity or political independence of states. Article 51 confirms the right of self-defence, which is allowed if an actual armed attack has occurred against a state. An armed attack must not necessarily originate from a state. If the attack by a non-state actor is comparable by scale and effect to an attack by state's armed forces it would be unreasonable to claim that states do not have the right to exercise self-defence because the attacker was a non-state actor. Different forms of anticipatory self-defence are not compatible with Article 51, and open to mistakes and abuses, which have also occurred in practice. But states may exceptionally exercise interceptive self-defence before an actual armed attack if another state or non-state actor has taken decisive and irreversible steps to begin an armed attack. A reasonable government would not require that the state waits for an inevitable attack to happen before acting. The Charter should not become a suicide pact. The Security Council is a guardian of international peace and security and for that purpose the Security Council has the right to authorise the use of armed force, if necessary, to maintain or restore international peace and security. The actions through the Security Council are preferable because they are based on the collective decisions involving the international community. True, the effectiveness of the collective security system is inevitably dependent on the political consensus in the Security Council and the reality proves that the latter may be fiercely divided, which leaves conflicts unresolved and causes more suffering.

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¹ Charter of the United Nations, preamble.

² Charter of the United Nations, Article 1(1).

³ Covenant of the League of Nations, Paris, 28 June 1919, entry into force 10 January 1920, [1919] UKTS 4, Preamble.

⁴ Treaty providing for the Renunciation of War as an Instrument of National Policy, Paris, 27 August 1928, entry into force 24 July 1929, 94 LNTS 57.

⁵ See Arnold D. McNair, "The Stimson Doctrine of Non-Recognition: A Note on Its Legal Aspects," *British Year Book of International Law* 14 (1933): 65–74.

⁶ Covenant of the League of Nations, Articles 10, 16.

⁷ C. H. M. Waldock, "The Regulation of the Use of Force by Individual States in International Law," *Recueil des Cours de l'Académie de Droit International* 81, Vol II (1952): 492.

⁸ Louis Henkin, "The Reports of the Death of Article 2(4) Are Greatly Exaggerated," *American Journal of International Law* 65 (1971): 544.

⁹ Eduardo Jiménez de Aréchaga, *El derecho internacional contemporáneo* (Madrid: Tecnos, 1980), 108.

 $^{^{10}}$ Charter of the United Nations (1945), Article 2(3).

¹¹ Louis Henkin, *International Law: Politics, Values and Functions* (Dordrecht: Martinus Nijhoff Publisher, 1990), 146.

 $^{^{12}}$ Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America), Merits, ICJ Reports (1986) 14, para 268.

¹³ Oscar Schachter, "The Right of States to Use Armed Force," *Michigan Law Review* 82 (1984): 1624.

Declaration on Principles of International Law concerning Friendly Relations and Co-operation among States in accordance with the Charter of the United Nations, GA Res 2625 (XXV), 24 October 1970. The resolution is not legally binding instrument, but it is still considered an authoritative

source reflecting the opinion of the members of the United Nations (the resolution was adopted by consensus). See also Ian Sinclair, "The Significance of the Friendly Relations Declaration," in *The United Nations and the Principles of International Law* (London: Routledge, 1994), 1–32.

- ¹⁵ See Antonio Tanca, "The Prohibition of Force in the U.N. Declaration on Friendly Declaration of 1970," in *The Current Legal Regulation of the Use of Force* (Dordrecht: Martinus Nijhoff, 1986), 397–412 for the discussion about the use of armed force in the declaration.
- ¹⁶ Charter of the United Nations (1945), Article 4(1).
- ¹⁷ Albrecht Randelzhofer and Oliver Dörr, "Article 2(4)," in *The Charter of the United Nations: A Commentary* (3rd edition, Oxford University Press, 2012), Vol I, 213.
- Customary international law is generated by decentralised factual conduct of states. When claiming that a customary norm exists, the claimant must show (1) constant, uniform and general practice and (2) conviction that particular practice reflects a legal obligation. All states are bound by customary law (even if they did not contribute to the process), except persistent objectors (states that consistently protested against the new emerging customary norm).
- ¹⁹ Military and Paramilitary Activities in and against Nicaragua, supra note 12, paras 188–190.
- ²⁰ *Ibid*, paras 175–177.
- ²¹ *Ibid*, para 181.
- ²² See also *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, Advisory Opinion, ICJ Reports (2004) 136, para 87.
- ²³ The Court has regarded the prohibition of the use of force as being "a conspicuous example of a rule of international law having the character of *ius cogens." Ibid*, para 190.
- ²⁴ Vienna Convention on the Law of Treaties (1969), Article 53.

- ²⁵ See, for example, *Barcelona Traction, Light and Power Company Limited* (Belgium v Spain), Second Phase, Judgment, ICJ Reports (1970) 3, paras 34–35.
- ²⁶ Prosecutor v. Anto Furundzija, Case No IT-95-17/1-T, ICTY, Judgment of the Trial Chamber, 10 December 1998, para 153.
- ²⁷ Vienna Convention on the Law of Treaties (1969), Article 64.
- ²⁸ Anthony D'Amato, *The Concept of Custom in International Law* (Ithaca: Cornell University Press, 1971), 132, note 73.
- ²⁹ See also Draft Articles on Responsibility of States for Internationally Wrongful Acts (2001), Article 48.
- ³⁰ See George Grafton Wilson, "War Declared and the Use of Force," *American Society of International Law Proceedings* 32 (1938): 106–127 for the practice of declaring wars.
- ³¹ Ian Brownlie, *International Law and the Use of Force by States* (Oxford: Clarendon Press, 1963), 26–28.
- Philip Marshall Brown, "Undeclared Wars," *American Journal of International Law* 33 (1939): 538–539.
- ³³ Article 1.
- ³⁴ For similar reasons, the post-Second World War Geneva Conventions (1949) and later instruments adopted the term "armed conflict" instead of the term "war."
- ³⁵ See, for example, D. W. Bowett, *Self-Defense in International Law* (New York: Fredrick A. Praeger, 1958), 148; Brownlie, *International Law and the Use of Force by States, supra* note 31, 362; Bert V. A. Röling, "The Ban on the use of Force and the U.N. Charter," in *The Current Legal Regulation of the Use of Force* (Dordrecht: Martinus Nijhoff, 1986), 3; Randelzhofer and Dörr, "Article 2(4)," *supra* note 17, 208; Yoram Dinstein, *War, Aggression and Self-Defence* (5th edition, Cambridge University Press, 2011), 88.

- ³⁶ See Richard D. Kearney and Robert E. Dalton, "The Treaty on Treaties," *American Journal of International Law* 64 (1970): 532–535 for political and economic coercion.
- Documents of the United Nations Conference on International Organization (1945), Vol VI, 331, 334–335.
- ³⁸ E.g. duty to refrain from the threat or use of force to violate the existing international boundaries or as a means of solving international disputes, duty to refrain from acts of reprisal involving the use of force, duty to refrain from any forcible action which deprives peoples from their right to self-determination.
- ³⁹ Definition of Aggression, GA Res 3314 (XXIX), 14 December 1974, Annex, Article 1.
- ⁴⁰ Charter of the United Nations, Article 2(7).
- ⁴¹ Bowett, *Self-Defense in International Law, supra* note 35, 153–154; Brownlie, *International Law and the Use of Force by States, supra* note 31, 380.
- ⁴² The Court has also taken a permissive position on this question. See, for example, *Armed Activities on the Territory of the Congo* (Democratic Republic of the Congo v. Uganda), Judgment, ICJ Reports (2005) 168, paras 92–105.
- ⁴³ See W. Michael Reisman and James Silk, "Which Law Applies to the Afghan Conflict," *American Journal of International Law* 82 (1988) 472–474 for what happened at the beginning of the Soviet invasion.
- ⁴⁴ Anthony D'Amato, *International Law: Process and Prospect* (2nd edition, Irvington: Transnational Publishers, 1995), 58–59.
- ⁴⁵ United Nations Conference on International Organisation Documents (1945), Vol 6, 556–558.
- ⁴⁶ Proposals for the Establishment of a General International Organization, http://www.udhr.org/history/dumbarto.htm (accessed 31 May 2013), Chapter II, Section 4.

- ⁴⁷ United Nations Conference on International Organisation Documents (1945), Vol 6, 304, 334–335.
- ⁴⁸ Corfu Channel (United Kingdom v. Albania), Merits, ICJ Reports (1949) 4, 35.
- ⁴⁹ Charter of the United Nations, Article 1(1).
- Louis Henkin, "Use of Force: Law and U.S. Policy," in *Right v. Might: International Law and the Use of Force* (2nd edition, New York: Council on Foreign Relations Press, 1991), 38.
- ⁵¹ This position was explicitly supported by the United States delegation at San Francisco Conference. United Nations Conference on International Organisation Documents (1945), Vol 6, 335.
- ⁵² See Romana Sadurska, "Threats of Force," *American Journal of International Law* 82 (1988): 239–268; Marco Roscini, "Threats of Armed Force and Contemporary International Law," *Netherlands International Law Review* 54 (2007): 229–277 for in depth analysis.
- Draft Declaration on Rights and Duties of States, GA Res 375 (IV), 6 December 1949, Annex, Article 9; Declaration on the Inadmissibility of Intervention in the Domestic Affairs of States and the Protection of Their Independence and Sovereignty, GA Res 2131 (XX), 12 December 1965, para 1; Friendly Relations Declaration, Annex 1, Section 1; Declaration on the Enhancement of the Effectiveness of the Principle of Refraining from the Threat or Use of Force in International Relations, GA 42/22, 17 November 1987, Annex, para 1.1.
- ⁵⁴ See Sadurska, "Threats of Force," *supra* note 52, 246–247.
- ⁵⁵ Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, ICJ Reports (1996) 226, para 48.
- ⁵⁶ *Ibid*, para 47.
- ⁵⁷ Military and Paramilitary Activities in and against Nicaragua, supra note 12, para 227.

- ⁵⁸ UN Doc S/PV.3438 (1994), 11.
- To be precise, there is a third, temporary transitional exception against former enemy states (any state which during the Second World War had been an enemy of any signatory of the Charter), but this has been obsolete for decades. See Charter of the United Nations, Articles 53, 107.
- ⁶⁰ Corfu Channel, supra note 48, 35.
- ⁶¹ Although the Kellogg-Briand Pact did not explicitly mention self-defence, its legality was reaffirmed during the negotiations.
- ⁶² Military and Paramilitary Activities in and against Nicaragua, supra note 12, para 195.
- ⁶³ Brownlie, *International Law and the Use of Force by States, supra* note 31, 278.
- ⁶⁴ Military and Paramilitary Activities in and against Nicaragua, supra note 12, para 191; Oil Platforms (Islamic Republic of Iran v. United States of America), Judgment, ICJ Reports (2003) 161, para 51.
- ⁶⁵ Gerald Fitzmaurice, "The Definition of Aggression," *International and Comparative Law Quarterly* 1 (1952): 139.
- ⁶⁶ Oil Platforms, supra note 64, para 64.
- ⁶⁷ Christine Gray, *International Law and the Use of Force* (3nd edition, Oxford University Press, 2008), 155–156.
- ⁶⁸ Karin Oellers-Frahm, "The International Court of Justice and Article 51 of the UN Charter," in *Weltinnenrecht: Liber Amicorum Jost Delbrück* (Berlin: Duncker & Humblot, 2005), 510.
- ⁶⁹ Definition of Aggression, Article 3(g).
- ⁷⁰ Military and Paramilitary Activities in and against Nicaragua, supra note 12, para 191. See René Värk, "State Responsibility for Private Armed Groups in the Context of Terrorism," *Juridica International* (2006) 184–193 for establishing the link between a state and a non-state actor.

- ⁷⁵ Brownlie, *International Law and the Use of Force by States, supra* note 31, 278; Louis Henkin, *How Nations Behave: Law and Foreign Policy* (2nd end, New York: Columbia University Press, 1979), 295; Antonio Cassese, "Article 51," in *La Charte des Nations Unies : commentaire article par article* (2e édn, Paris: Economica, 1991), 776–780.
- Michael J. Glennon, "The Fog of Law: Self-Defense, Inherence, and Incoherence in Article 51 of the United Nations Charter," in *Harvard Journal of Law and Public Policy* 25 (2002), 546.
- ⁷⁷ Randelzhofer and Dörr, "Article 2(4)," *supra* note 17, Vol II, 1423–1424.
- Military and Paramilitary Activities in and against Nicaragua, supra note 12, para 194; Armed Activities on the Territory of the Congo, supra note 42, para 143.
- 79 Different states, institutions and legal scholars use different terms for more or less the same content.
- ⁸⁰ Meng, "The Caroline," supra note 71, 537–538.
- ⁸¹ See 26 British Foreign and State Papers (1837–1838) 1372–1377; 29 British Foreign and State Papers (1840–1841) 1126–1142; 30 British Foreign and State Papers (1841–1842) 193–202 for the correspondence between the British and United States Government.

⁷¹ Warner Meng, "The Caroline," in *Encyclopedia of Public International Law* (4 vols., Amsterdam: North-Holland, 1992–2000), Vol I, 537–538.

⁷² SC Res 1368, 12 September 2001; SC Res 1373.

 ⁷³ Statement by the North Atlantic Council, NATO Press Release (2001) 124,
 12 September 2001, http:// www.nato.int/docu/pr/2001/p01-124e.htm (accessed 31 May 2013).

⁷⁴ Terrorist Threat to the Americas, OEA/Ser.F/II.24, RC.24/RES.1/01 (2001).

⁸² 29 British Foreign and State Papers (1840–1841), 1138.

Stanimir A. Alexandrov, *Self-Defense against the Use of Force in International Law* (The Hague: Kluwer Law International, 1996), 153–154.

- ⁸⁴ Anthony Clark Arend and Robert J. Beck, *International Law and the Use of Force: Beyond the UN Charter Paradigm* (London: Routledge, 1993), 77.
- ⁸⁵ See also Dinstein, *War, Aggression and Self-Defence, supra* note 35, 203–205.
- ⁸⁶ National Security Strategy of the United States of America, September 2002, http://www.state.gov/documents/organization/63562.pdf (accessed 31 May 2013)
- ⁸⁷ *Ibid*, 15.
- ⁸⁸ W. Michael Reisman and Andrea Armstrong, "The Past and Future of the Claim of Pre-emptive Self-Defense," *American Journal of International Law* 100 (2006): 549–550.
- Additionally, supportive literature is very limited. Michael Bothe, "Terrorism and the Legality of Pre-emptive Force," *European Journal of International Law* 14 (2003): 232.
- Rio Declaration on Environment and Development, Rio de Janeiro, 3–14 June 1992, Principle 15.
- ⁹¹ SC Res 487, 19 June 1981.
- ⁹² Alexandrov, Self-Defense against the Use of Force in International Law, supra note 83,
- 93 UN Doc S/RES/487 (1981).
- ⁹⁴ SC Res 487. 19 June 1981.
- ⁹⁵ The criteria are not included in Article 51, but are derived from customary international law and must be assessed based on generally accepted state practice. *Military and Paramilitary Activities in and against Nicaragua, supra* note 12, para 194, 237; *Oil Platforms, supra* note 64, paras 43, 76.
- ⁹⁶ Cassese, "Article 51," *supra* note 75, 775.
- 97 Oscar Schachter, "The Right of States to Use Armed Force," *Michigan Law Review* 82 (1984): 1635.

- 98 Josef L. Kunz, "Individual and Collective Self-Defense in Article 51 of the Charter of the United Nations," *American Journal of International Law* 41 (1947): 876.
- ⁹⁹ Dinstein, War, Aggression and Self-Defence, supra note 35, 262.
- 100 Military and Paramilitary Activities in and against Nicaragua, supra note 12, para 191.
- ¹⁰¹ Ibid, 199; Oil Platforms, supra note 64, para 51.
- ¹⁰² UN Doc S/2001/946 (2001).
- Military and Paramilitary Activities in and against Nicaragua, supra noteparas 195–196.
- 104 Dinstein, War, Aggression and Self-Defence, supra note 35, 281–282.
- ¹⁰⁵ Charter of the United Nations, Article 24(1).
- ¹⁰⁶ However, the Court hinted indirectly that the state which fails to inform the Security Council loses the right to justify its actions as self-defence. *Military and Paramilitary Activities in and against Nicaragua*, *supra* note 12, paras 235–237; *Armed Activities on the Territory of the Congo*, *supra* note 42, paras 145–147.
- Military and Paramilitary Activities in and against Nicaragua, supra note 12, paras 200, 235.
- ¹⁰⁸ SC Res 545, 20 December 1983; SC Res 546, 6 January 1984; SC Res 574, 7 October 1985.
- ¹⁰⁹ E.g. UN Doc S/PV.2963 (1990) (Malaysia in 1990)
- ¹¹⁰ E.g. UN Doc A/PV.561 (1956) (Egypt in 1956); UN Doc S/PV.836 (1958), paras 5–6 (Lebanon in 1958); UN Doc S/15017 (1982) (the United Kingdom in 1982).
- 111 Charter of the United Nations, Article 24(1).
- 112 Altogether there are 193 member states in the United Nations.

- ¹¹³ Charter of the United Nations, Article 24(1).
- 114 Ibid, Article 25. The other organs may legally bind the member states only in certain administrative matters within the United Nations, for example, the General Assembly adopts the budget and determines the amount every member states has to contribute.
- 115 *Ibid*, Article 41.
- 116 *Ibid*, Article 42.
- 117 *Ibid*, Article 39.
- ¹¹⁸ E.g. SC Res 1160, 31 March 1998.
- ¹¹⁹ E.g. SC Res 713, 25 September 1991.
- ¹²⁰ E.g. SC Res 687, 3 April 1991.
- Documents of the United Nations Conference on International Organisation, Vol 12, 505.
- 122 Charter of the United Nations, Article 27(3).
- ¹²³ Ingrid Österdahl, *Threat to the Peace: The Interpretation by the Security Council of Article 39 of the UN Charter* (Uppsala: Iustus, 1998), 103–105.
- ¹²⁴ E.g. SC Res 713, 25 September 1991.
- ¹²⁵ E.g. SC Res 688, 5 April 1991.
- ¹²⁶ E.g. SC Res 1132, 8 October 1997.
- ¹²⁷ E.g. SC Res 808, 22 February 1993.
- ¹²⁸ E.g. SC Res 1267, 15 October 1999.
- ¹²⁹ E.g. SC Res 1540, 28 April 2004.
- ¹³⁰ SC Res 84, 7 July 1950.
- ¹³¹ SC Res 678, 29 November 1990 (Iraq); SC Res 794, 3 December 1992 (Somalia).

- ¹³² SC Res 1973, 17 March 2011 (Libya).
- 133 Charter of the United Nations, Article 43.
- When the Security Council authorised the use of armed force to expel Iraq from Kuwait in 1990, the resolution read "[the Security Council] requests all States to provide appropriate support for the actions undertaken [for that purpose]" (emphasis added). SC Res 678, 29 November 1990 (Iraq).
- 135 The whole Chapter VIII of the Charter is dedicated to "regional arrangements."
- 136 Charter of the United Nations, Article 53.
- See also Ugo Villani, "The Security Council's Authorization of Enforcement Action by Regional Organizations," *Max Planck Yearbook of United Nations Law* 6 (2002): 535–557.
- ¹³⁸ Nico Krisch, "Unilateral Enforcement of the Collective Will: Kosovo, Iraq, and the Security Council," *Max Planck Yearbook of United Nations Law* 3 (1999) 86–90.
- ¹³⁹ SC Res 1199, 23 September 1998; SC Res 1203, 24 October 1998.
- ¹⁴⁰ Charter of the United Nations, Article 50.
- ¹⁴¹ Jeremy Carver and Jenine Hulsmann, "The Role of Article 50 of the UN Charter in the Search for International Peace and Security," *International and Comparative Law Quarterly* 49 (2000): 528–557.
- ¹⁴² E.g. UN Doc S/21786 (1990).

Comparing Contemporary Counterinsurgency Doctrines and Theories

By Major Marc Verret, Canadian Army

"A revolutionary war is 20 per cent military action and 80 per cent political" ¹

David Galula

One of the key lessons to come out of more than a decade of counterinsurgency in Afghanistan by Canadian, US, and Western armed forces is the importance of a sound counterinsurgency doctrine. In this article some key counterinsurgency doctrines and theories will be critically examined to enable a deeper understanding of the relevance of having a sound counter-insurgency doctrine at the national and strategic levels. The first part of the article will examine the Canadian and US counterinsurgency doctrine as well as the Comprehensive Approach. In addition, several counterinsurgency models will be examined beginning with Sir Robert Thompson's counterinsurgency concept, the David Kilcullen 'Three Pillars' model, followed by the David Galula model. The aim of the article is to critically examine the Canadian doctrine as it has developed through the Afghanistan experience and to determine its strengths and weaknesses and to recommend improvements in the doctrine.

Canadian and US COIN Doctrine

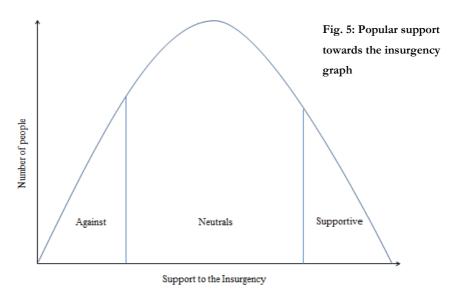
Both the Canadian Forces and US doctrine defines counterinsurgency as, 'Those military, paramilitary, political, economic, psychological and civic actions taken to defeat an insurgency.' From this definition, we can note that to defeat the insurgency is not simply to remove or neutralise the insurgent's military capabilities. The military is only one of many weapons in the counterinsurgent team's arsenal that is needed for the overall strategy to succeed. Hence, there is the necessity to rapidly identify the root causes of the struggle. These root causes are often

socio-political and economic grievances that tend to fuel the insurgency.³ Their resolution can only be achieved through the integrated efforts of all the various agencies and departments. This solidifies the need for a CA/Whole of Government (WoG) framework to be used in counterinsurgency strategy.

The population is vital. The 2008 Canadian Forces doctrine assets, 'the primary strategic centre of gravity is the civilian populace'. Indeed, all the counterinsurgent actions should be targeted towards the local population in order for the effect to garner popular support for the legitimate government. The local population will always be divided into three categories:

- a. an active minority for the cause;
- b. A neutral or passive majority; and
- c. An active minority against the cause.⁵

Almost all insurgencies will have both an active minority against the insurgency and a minority supporting the insurgency. The main battlefield will be to influence the neutral majority of the population. If the insurgents influence the neutral faction to either support the cause or remain passive, then the insurgent cause will be victorious. If the counterinsurgents can deny this active/passive support to the insurgents, then their cause will likely win. From my analysis of these popular categories, the visualisation of it can be easier grasped through this graph. (Fig. 5 Author).



Isolating the insurgents from the population will allow the counterinsurgents to shift potential support towards the legitimate government. Securing the population should be seen as a priority.

Principles

In order to assist the military and the other departments and agencies the development of principles is essential to provide guidelines. These principles are based on historical experience as well as from counterinsurgency theorists. The assessment and evaluation of the situation, as well as sound judgment, must be applied while applying the various principles to the counterinsurgency campaign. However, principles must not be considered a mechanical checklist. Clear evaluation of their use is required to ensure that there are applicable to the problem set.

The following table illustrates the key principles considered in Canadian and US doctrine:

| Canadian Doctrine ⁷ | US Doctrine ⁸ |
|--------------------------------------|-----------------------------------|
| Effect political primacy in the | Legitimacy is the main objective |
| pursuit of a strategic aim | |
| Promote unity of purpose to | Unity of effort is essential |
| coordinate the actions of | |
| participating agencies (including | |
| government machinery) | |
| Understand the complex dynamics | Political factors are primary |
| of the insurgency, including the | |
| wider | |
| environment | |
| Exploit intelligence and | Counterinsurgents must |
| information | understand the environment |
| Separate the insurgents from their | Intelligence drives operations |
| physical and moral sources of | |
| strength, including addressing their | |
| grievances, real and perceived | |
| Neutralize the insurgent | Insurgents must be isolated from |
| | their cause and support |
| Sustain commitment to expend | Security under the rule of law is |
| political capital and resources over | essential |
| a long period | |
| Conduct longer-term, post- | Counterinsurgents should |
| insurgency planning | prepare for a long-term |
| | commitment |

While the wording is different the meaning is quite similar. The most visible difference is that the Canadian doctrine emphasizes the importance of neutralizing the insurgents, while the US doctrine sees security under the rule of law to be essential. To neutralise is the selective destruction, disruption, and dislodgement of insurgents. This should not to be perceived as attrition warfare as the sheer destruction of the insurgents will never be achieved without solving the root grievances. The excessive use, or misuse, of force while neutralising the insurgents, could potentially have a harmful effect on the population and may actually fuel the insurgency. The US doctrinal principle of 'security under the rule of law is essential' is securing the population. The need to

transition rapidly from combat operations to law enforcement is vital to ensure that the insurgents are seen as criminals, thus losing public support. 10

Unity of effort

Counterinsurgencies are complex by nature. They require multiple instruments of national power as well as outside agencies to resolve the struggles. The various socio-political and economic grievances are not, by their nature, military problems but the military efforts are important during the conduct of counterinsurgency. However, military operations are only truly effective when integrated within an overarching comprehensive approach strategy. A successful counterinsurgency campaign will effectively influence the neutral population through the resolution of the various grievances while protecting them against insurgent activities. Synergy will be achieved through the integration and cooperation of the various players towards a common goal.

The US doctrine places a great deal of emphasis on the 'Unity of Effort'. The US doctrine (2006) dedicates an entire chapter of FM 3-24 on the subject. ¹² It explains how the military action is secondary to the political one. The population's needs are focused primarily on political, social and economic programs instead of military ones. While the security line of operation is essential, the governance and developmental lines are even more important to build a lasting peace. The military provides the vital security to enable the other agencies to conduct their programs. The military must understand that they do not command and lead the various other organisations. Military leaders must use a great deal of tact and subtlety in order to influence their civilian colleagues. The comprehensive approach is vital to the successful completion of the mission. The Canadian doctrine mentions briefly the comprehensive approach and vaguely discusses the need for unity of purpose.

The Canadian doctrine tends to use the expression 'unity of purpose' to describe the coordination between the various actors in counterinsurgency. The expression tends to be a lesser form of 'Unity of Effort' as described by the following passage in the Canadian doctrine: '[...] working in a unity of purpose and ideally in a unity of effort in order to create enduring solutions to the root causes of the

insurgency and reach the desired operational end-state. As with the US doctrine, the use of the comprehensive approach is seen as essential for the conduct of counterinsurgency operations.

Executing Counterinsurgency Operations

There are various approaches to conducting counterinsurgency operations in the Canadian and US doctrines. They range from the clear-hold-build model, combined action, limited support, or any combination of them. ¹⁵ Hence, there is no magic approach or quick fix to the execution of these operations. All approaches require the unity of effort of all the participating agencies. The US doctrine describes five Logical Lines of Operations: security operations, Host Nations forces, essential services, governance, and economic development - all five lines are supported by the Line of Operation of the information operations campaign (Fig. 6). ¹⁶

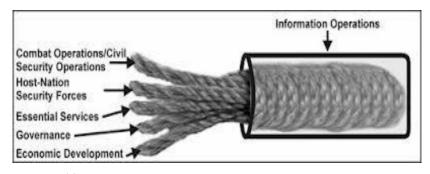


Fig 6: The strengthening effect of interrelated logical lines of operations

The Canadian doctrine provides an example based on a four Lines of Operation model: governance, security, political process, and reconstruction (Fig. 7). It prescribes the use of the ink spot or *tâche d'huile* approach to executing counterinsurgency. ¹⁸

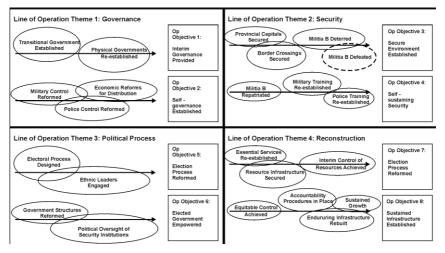


Fig. 7: Example of COIN Lines of Operations.

The Canadian version of the 'taĉhe d'huile' or ink spot approach includes the following elements:

- a. Securing a firm base and initial government planning;
- b. Engagement of the lower levels of government;
- c. Clear area of insurgent presence and influence;
- d. Government lead in the return of displaced persons;
- e. CIMIC activities by the military;
- f. Develop security presence and set conditions for sustainable security;
 - g. Set conditions for sustainable development; and
 - h. Continued campaign development and transition.²⁰

In order for the ink spot technique to be effective, only a comprehensive approach can be used. The emphasis is not only on security, but also on governance and development. This cannot be stressed enough.

Both the Canadian and US doctrines insist that intelligence is of key importance. In a counterinsurgency environment intelligence drives operations. The importance of selective targeting will not only benefit the counterinsurgent, but will also make a lasting impression upon the population. Both doctrines commit a chapter to it.²¹ The biggest challenge to the intelligence analysis is the extensive volume of social and

cultural information to be gathered to understand the operational environment in a comprehensive approach. For the military leadership and their staffs to acquire an accurate picture of the battlespace the required level of commitment to the acquisition of knowledge of both the enemy and also the population being protected should be equal. To determine the best method to fight the insurgency it is essential to receive the required information to assist in the identification of the root causes and grievances.

While the US doctrine expresses the importance of the information operation, the Canadian doctrine dedicates a chapter toward describing its vital significance in the conduct of a counterinsurgency campaign. ²³ The population is the prize and information operations play an essential role in countering the insurgents' narrative as well as in promoting the deeds of the counterinsurgents. All leaders and soldiers must understand the ramification of their actions. This can lead to serious second- and third-order effects that can possibly cause substantial insurgent gains. The method used to gain positive influence can be both kinetic and non-kinetic. As mentioned in the Canadian doctrine: 'Due to the focus on the will of the population, COIN operations are less about the application of physical force (fires) than the influence of perceptions and ultimately will and behaviour.' Perception is everything in a counterinsurgency environment.

The US doctrine also has a great inter-agency whole-of-government counterinsurgency guide. This guide is endorsed and signed by the three major stakeholders: the Administrator of the US Agency for International Development (USAID), the Secretary of Defence, and the Secretary of State. The Canadian government has no such document. The benefit of having such as guide is that it allows the various agencies to have a common body of basic knowledge. By having this guide signed and agreed-upon by the agency leaders, it offers little room for discussion on the way to conduct counterinsurgency campaigns. Furthermore, it allows the various staffs to be able to speak a common language, which is often the cause of many frictions.

2.2 Comprehensive Approach

In the past, conflict regions involved a complex interplay between various state and non-state actors. Actors included International Organisations (IOs), Non-Government Organisations (NGOs), militias, Armed Forces, civilians, contractors, host-nation officials and journalists. In examining these situations, it is acknowledged that those conflicts could not be resolved using solely conventional military intervention. These counterinsurgencies were dynamic, complex and involved an operating environment that was more population-centric with deep root-causes contributing to the crises. It was seen that the other departmental organisations such as foreign affairs, national-level development agencies, police forces and NGOs could play a vital role. However, their contributions often only increased the ever-present friction and fog of war.

The various actors' efforts were rarely coordinated or synchronised within an overarching operational framework or campaign plan. The lack of synchronisation thus created departmental stove—pipe answers, which may not have been the optimal solutions to these complex issues. While it is often easier to resolve the symptoms of the conflict, addressing the root-causes is essential to ensure a lasting and sustainable peace. Therefore the solution is not a purely military one. The method employed to assist in the resolution of these root-causes is known as the comprehensive approach. Although there is no set definition for the comprehensive approach, here are two examples of how certain nations define it.

The Canadian military definition of comprehensive approach is:

The application of commonly understood principles and collaborative processes that enhance the likelihood of favourable and enduring outcomes within a particular environment. The comprehensive approach brings together all the elements of power and other agencies needed to create enduring solutions to a campaign. Working with a comprehensive approach will require a unifying theme, manifested in a common end-state, a unity of purpose and, ideally, a unity of effort across all agencies. Much of this approach will be realized at the lower operational and tactical levels through military forces working hand-in-hand with other agencies.²⁶

The US Army Comprehensive Approach is defined as:

An approach that integrates the cooperative efforts of the departments and agencies of the United States Government, intergovernmental and nongovernmental organizations, multinational partners, and private sector entities to achieve unity of effort toward a shared goal.²⁷

From these definitions we can deduce that the comprehensive approach requires the combined synergy of the military, foreign affairs, developmental agencies, other governmental departments, international organisations and possibly non-governmental organisations, in the accomplishment of the objectives. The concept of harnessing the various skills and competencies of the diverse governmental functions is not new. The various counterinsurgency theorists, such as Sir Robert Thompson, David Kilcullen, and David Galula, have all mentioned the importance of using the various skills-set of the entire nation in solving the problems caused by complex conflicts. This is why the comprehensive approach should be at the forefront when developing a counterinsurgency campaign plan.

Employing this approach will necessitate a unifying narrative that is expressed in a collectively-attainable end-state. This narrative should strive towards a unity of commitment and, if possible, a unity of effort across all departments and organisations. The main components of national power and influence are diplomacy, information, military, and economics (DIME).²⁸ These elements of national power and influence are brought to bear while using the comprehensive approach to counterinsurgency. To develop a common understanding of the operating environment, the main tool employed is the Political, Military, Economics, Social, Infrastructure, and Information (PMESII) analysis. PMESII is used in conflict resolution and assists in determining the strengths and weaknesses within a nation; also it will assist in determining the possible second- and third-order effects that our power projection activities will have on nations across these domains. This supports the framework development of the various lines of operations. Each line of operation will see the grouping-together of similar and related operational objectives. This will involve a number of departments or organisations all working toward a common operational objective. Furthermore, selected departments will lead various lines of operation, while others play a supporting role based upon their various mandates

and individual missions. The challenge is to coordinate and synchronise at the national level in the conduct of international crisis response operations. Furthermore, the conduct of coalition operations also is challenging, particularly when combined with the complexities of the multi-national environment. While all coalition nations are employed under a common framework agreement (for example under the NATO Charter), each nation has its own national caveats and interests in the host-nation country. These interests and caveats drive the thought process that is used by each country, while each country uses its own variation of the comprehensive approach. The political negotiations between nations will be held at the highest level to ensure that the Coalition composition meets the required capabilities and competency sets that will ensure efficient peace-building and credible nation-building. Regardless of the form applied, it is essential to focus on the host-nation and its desires and requirements. The nurturing of the host-nation is critical in establishing a stable and secure platform to develop and refine good governance. The host-nation must be receptive to assistance for an effective campaign to be waged. We must make sure that we do not push the host-nation in a direction contrary to its beliefs.²⁹ During the negotiations of the conduct of the various lines of operations, if the forces encounter resistance to their plans, they must ensure that they do not push the host parties too far and alienating themselves to the forces and thereby increasing the risk of violence.³⁰

In essence the comprehensive approach is a definite force-multiplier in counterinsurgency. It allows nations and alliances to resolve complex crisis situations. However, internal considerations will always be present such as individual departmental interests and motives. Furthermore, external considerations such as host-nation personnel, a multi-national environment, and other various international and non-state actors will also produce tensions and complicate the conflict-resolution process. In order to resolve these considerations, we need to ensure that the leaders and support staff of each of the departments, representatives of host-nations and other participating nations, and international and non-governmental organisations fully understand in simplistic terms the:

a. root-causes and symptoms of the crisis (from the security, governance, and developmental point of view) – that is understanding the operating environment;

- b. host-nation needs and requirements;
- c. comprehensive campaign plan using terms common to all;
- d. implementation plan for our comprehensive strategy;
- e. methods and means we will employ; and
- f. roles, mandates, interests and cultures of the various departments, organisations and countries prosecuting the comprehensive approach.

By following those simple, yet complex elements, we can minimise the friction between all the various players and by extension be more effective as a comprehensive force in counterinsurgency.

Sir Robert Thompson's Counterinsurgency Concepts

In Sir Robert Thomson's work entitled *Defeating Communist Insurgency*, he offers a comprehensive look into counterinsurgency based on his experiences in both Malaya and Vietnam. ³¹ As a former military officer and expert counterinsurgency specialist, he developed a series of principles and established distinct stages of a counterinsurgency. I will examine them to the existing Canadian doctrine.

Principles

Thompson mentions: 'Accepting, therefore, that prevention is better than cure, and that the government must be positive in its approach.' In other words a government must strive to defeat the insurgency at the earliest possible moment prior to it developing into a full-fledged guerrilla war. However, this may be impossible to achieve as the government might not yet distinguish the various signs of a subversive movement or it might be in denial of the movement's very existence. For an effective counterinsurgency campaign to be successful to defeat the insurgents, Thomson offers five principles:

- a. The government must have a clear political aim: to establish and maintain a free, independent and united country which is politically and economically stable and viable.
- b. The government must function in accordance with the law.
- c. The government must have an overall plan.
- d. The government must give priority to defeating the political subversion, not the guerrilla.
- e. In the guerrilla phase of an insurgency, a government must secure its base areas first.³³

While analysing these principles the government, or the counterinsurgent that supports the government, must have a plan that not only aims at neutralising the insurgents, but one that also addresses all the other issues in a comprehensive approach since the insurgents are not the only Obviously all necessary efforts should be made to defeat the insurgents and eliminate the shadow governance cadre before they gain any traction, or better yet, during their build-up. However, once military action has ceased a civilian comprehensive program needs to follow-up in order to to solidify the gains. Otherwise, no amount of military action will achieve a positive outcome. Therefore the comprehensive plan also should take into consideration social, political, economic, administrative, police and other key issues as well.³⁴ These various aspects or domains should be mutually-supportive of each other in the counterinsurgency campaign and a proper balance between military and civilian action is essential. Every player should understand his role and that effort should be synchronised to avoid duplication of effort. ³⁵ The isolation of the insurgents and their political cadre from the population and support bases is the ultimate aim.

All of the government's actions must remain within the law. A government that does not remain within the rule of law will not only fuel the insurgency, but is also morally wrong. The government has duties to fulfil towards the population and one of the most sensitive duties relates to detention. This point is politically sensitive and a variety of correct policies need to be in place to insure proper practice. The practice of securing the more built-up or developed areas is to be prioritised over

the more remote rural villages in the earlier stages. These more secure areas normally hold the largest concentration of the population and they should be the starting point for the government's expansion as these areas are relatively easier to control. This would provide both the population and counterinsurgent with a boost of confidence.

Stages

What Thompson describes as his stages might also be described as the tactical application of counterinsurgency. This is the way to conduct operations and is not too different from the current Canadian doctrine. Thompson describes the four distinct stages: clearing, holding, winning and won.³⁶ 'Clearing' is conducted to remove the guerrillas out of an area that is to be secured. This is a joint military and police action using extensive intelligence in order to force the guerrillas out of a set zone. A clearing operation is not conducted unless the hold stage is ready to be executed. Next is the 'hold'. Its main aim is to re-establish governmental authority and provide a security framework. As described by Thompson, the hold involves: 'the creation of strategic hamlets, the formation of hamlet militia and the imposition of various control measures on the movement of both people and resources.³⁷ These measures are planned and enacted to provide protection to the people, to neutralise the political cadre as well as to isolate the guerrillas from the population. This stage never really has an end as it tend to overlap with the next stage, 'winning'. The winning stage occurs when good governance and administration begin. It is marked with numerous short-term social and economic projects such as building schools, improving medical services and clinics, road work, bridges, developing agriculture, and a general sense of improved lifestyle among the people.³⁸ Economic stimulation through various agricultural initiatives improves the standard of living and allows for monetary gains. Finally, the 'win' stage occurs when the population has demonstrated their open support to the government, the guerrillas have been pushed away from the troubled regions, and the government is effectively protecting against re-infiltration of the insurgents. This stage will see all restrictions lifted and a return to normalcy. Thompson says that during this stage, 'greater attention can

be given to the government's long-term aim of creating a politically and economically stable and viable community.³⁹

This is very similar to both the current US and Canadian doctrine's approach of Clear-Hold-Build within a 'tâche d'huile' framework. From their Afghan experience the Canadians have also adjusted this approach to include the stages of Shape and Enable. The relooked Shape-Clear-Hold-Build-Enable begins with the shaping of an area, which essentially is setting the conditions that allow the 'clear' to commence. Tactical mission tasks such as intelligence-gathering, reconnaissance, key-leader engagements, and host-nation security assessments are conducted during the 'shaping' phase. In the recent Afghan fight, 'enable' was used to advance nation-building. Using the training wheel analogy for first-time readers, during this phase, forces were to assist the governance and administration at all levels in the performance of their duties.

David Kilcullen's Three Pillars Model

David Kilcullen is an Australian-born counter-insurgency expert currently employed by the US government. His analysis of insurgency has led to his development of the 'Three Pillar' model or framework which is describes in *Three Pillars of Counterinsurgency*. Before looking into the Three Pillars model I will examine the environment which led Kilcullen to develop such a framework. The Three Pillars will then be analysed and compared with the current Canadian and US doctrinal documents.

As described by Kilcullen, the conflict environment is a sort of 'conflict ecosystem'. This environment has many different internal and external actors, all interacting together in either a positive or negative manner (Fig.: 8). These actors normally interact in harmony, in a cooperative, and even sometimes in a competitive way. However, due to power struggles, these interactions can become combative and destructive and lead to the spiralling downfall of society. It is important that the counterinsurgent forces do not consider themselves outside this environment.

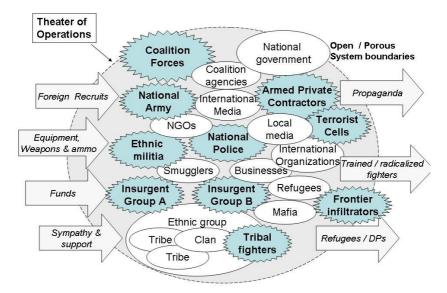


Figure 8 – the Conflict Ecosystem

They are simply another player within this ever dynamic and evolving environment. The major difference between the counterinsurgent and the others is intent and Kilcullen describes it as: 'our intent is to reduce the system's destructive, combative elements and return it to its "normal" state of competitive interaction. The return to a so-called 'normal state' is not necessarily the same as the western world sees it. It is culturally-based; consequently normal from a Canadian's perspective might not be the same as that of an Afghani's .

While killing insurgents is part of the requirement to return to normalcy in the counter-insurgency cycle, it can also have an adverse effect on the counterinsurgents' influence on the population. Collateral damage and excessive force all have negative consequences and second- and third-order effects. From a political perspective, the more force required, the worse the operation is going. 44

This led to the development of a framework that can be utilised in a counterinsurgency environment. This framework is called the Three

Pillars. It uses the analogy of a temple (or house): the floor or foundation is Information; the three pillars are security, political and economic issues; and the roof supports the aim of control (Fig.: 9). ⁴⁵ This framework is based on a comprehensive approach and unity of effort of all the various departments and agencies.

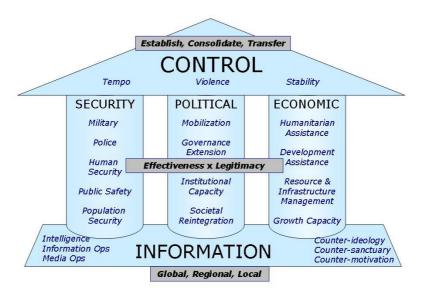


Figure 9 - Inter ageny Counterinsurgency Gramework

At the house's foundation there is information. Information is essential to influence and persuade the population in order to establish some form of control. The information strategy must be flexible to ensure proper messaging in providing the unifying themes. It is critical to understand the various elements within the dynamic environment. Kilcullen says: '...understanding the effects of our operations on the population, adversaries and the environment. Everything from intelligence to media operations must be used and synchronised to achieve the desired effect. This information war should not only be conducted at the local, regional and nation level, it also must be broad enough to influence the international stage.

Once a solid base of information is attained, the three pillars of security, political and economic issues may be developed. This must be done in a synchronised and simultaneous manner so that all pillars maintain an equally important status. If one pillar should progress more rapidly, the overall campaign would risk being unbalanced. For example, if we have too much economic development without the required level of security, those development projects become potential targets that the insurgents can exploit. The same would exist if there was too much economic development without the required political development. In such a scenario, corruption and other forms of monetary profiteering could manifest themselves without the proper administrative governance, and simply fuel the insurgency. Kilcullen states: In developing each pillar, we measure progress by gauging effectiveness (capability and capacity) and legitimacy (the degree to which the population accepts that government actions are in its interest).

As mentioned previously, the overarching goal of this framework is control. It is not: 'to reduce violence to zero or to kill every insurgent, but rather to return the overall system to normality.' To transfer control to a legitimate institution is regarded as the end-state.

When comparing this model to the various doctrines, we can obviously see the similarities in both the Canadian and US doctrine. These similarities include the need of a solid base of information (both intelligence and information operations), to provide the building blocks for security and capacity building. However, the Canadian comprehensive approach described briefly in its counterinsurgency doctrine does not provide such an accurate picture of the environment dynamic as well as the synchronisation between efforts (pillars). Clearly, this model is not only designed for counterinsurgency operations but also for stability and nation building. This model is vital while conducting clear-hold-build operations and should be exploited within the Canadian doctrine. Again the US doctrine provides similar information, and sometime much more detailed explanations of the various actors, under its 'Unity of Effort' chapter, but it is not as rapidly adaptable for use.

David Galula's Hot Revolutionary War Model

David Galula is a French national that was born in Tunisia. He is regarded as an expert in counterinsurgency. His theory of the 'Hot Revolutionary War' is based on his experience, more particularly his Algerian experience. ⁵¹ This theory is important as it describes as series of laws that enable counterinsurgents to defeat an insurgency. His approach pertains to the establishment of a step-by-step methodology following a set of principles.

Galula says that 'if conventional warfare does not work, if insurgency warfare cannot work, the inescapable conclusion is that the counterinsurgent must apply warfare of his own.⁵² This is based on the following four laws:

- a. First Law: Support of the population is as necessary for the counterinsurgent as for the insurgent.
- b. Second Law: Support is gained through an active minority.
- c. Third Law: Support from the population is conditional.
- d. Fourth Law: Intensity of effort and vastness of means are essential.⁵³

While examining these laws it is easy to identify the essential actor which needs to be considered...the population. Galula describes that one of the hardest activities is how counterinsurgents keep an area clean. From the current Canadian doctrine, the answer to this question would be the 'hold' phase of the Clear-Hold-Build approach and the support of the population. These take full advantage of our gains by holding the cleared areas. Hence, the population is the relentless objective of all conflicting parties. Victory can only achieved when the insurgents are isolated from the population. ⁵⁵

In his fourth law, Galula says: 'This means that the efforts cannot be diluted all over the country but must be applied successively area by area.'⁵⁶ We can see the correlation between this and the 'Ink spot' approach used within the Canadian doctrine. The importance of not overextending the counterinsurgents' ability to influence the population and isolate the insurgents cannot be stressed enough.

The following is the step-by-step procedure that is the strategy that was derived from the laws:

- 1. Concentrate enough armed forces to destroy or to expel the main body of armed insurgents.
- 2. Detach for the area sufficient troops to oppose an insurgent's comeback in strength, install these troop in the hamlets, villages, and towns where the population lives.
- 3. Establish contact with the population, control its movements in order to cut off its links with the guerrillas.
- 4. Destroy the local insurgent political organisations.
- 5. Set up, by means of elections, new provisional local authorities.
- 6. Test these authorities assigning them various concrete tasks. Replace softs and incompetents, and give full support to the active leaders. Organise self-defence units.
- 7. Group and educate the leaders in national political movements.
- 8. Win-over or suppress the last insurgent remnants.⁵⁷

While examining these eight steps, there is a parallel with the current Clear-Hold-Build approach as well as the need for a comprehensive approach. The approach is very similar to what was used in Afghanistan for Operation *Kalay*. The establishment of local governmental organisations and administrations will require the need for instruments other than the military. A diplomatic and developmental dimension is required. This is included within the current Canadian doctrine. However, as mentioned previously, there is need to further express the true meaning of comprehensiveness, such as the chapter 2 in FM 3-24, Unity of Effort.

To conclude, this article compared the Canadian counterinsurgency doctrine with the US Army/Marine doctrine and also compared these two national doctrines with the major Western theorists of counterinsurgency. The Canadian doctrine was found to be generally sound and to possess only a couple of serious flaws: the comprehensiveness or unity of effort needs to be expressed in more detail. In addition, the Canadian doctrine, from a comprehensive approach, has no existing agreed-upon inter-agency counterinsurgency doctrine such as the US government's inter-agency COIN guide. If these two issues are addressed the Canadian counterinsurgency doctrine can take its place as a highly effective counterinsurgency model for Western nations.

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³ Department of National Defence, *B-GL-323-004/FP-003 Counter-Insurgency Operations*, p. 1-3.

⁴ Department of National Defence, *B-GL-323-004/FP-003 Counter-Insurgency Operations*, p. 1-14.

⁵ US Department of Army, Field Manual 3-24 *Counterinsurgency Operations*, p. 1-20.

⁶ Idem.

⁷ Department of National Defence, *B-GL-323-004/FP-003 Counter-Insurgency Operations*, pp. 3-2/3-3.

⁸ US Department of Army, Field Manual 3-24 *Counterinsurgency Operations*, pp. 1-21 – 1-24.

⁹ Department of National Defence, *B-GL-323-004/FP-003 Counter-Insurgency Operations*, p. 3-14.

¹⁰ US Department of Army, Field Manual 3-24 *Counterinsurgency Operations*, pp.1-23/1-24.

¹¹ *Ibid*, p. 2-1.

¹² *Ibid*, Chap. 2.

¹³ Department of National Defence, *B-GL-323-004/FP-003 Counter-Insurgency Operations*, p. 1-3.

¹⁴ *Ibid*, p. 1-15.

¹⁵ US Department of Army, Field Manual 3-24 *Counterinsurgency Operations*, p. 5-18.

¹⁶ *Ibid*, p. 5-6.

¹⁷ Department of National Defence, *B-GL-323-004/FP-003 Counter-Insurgency Operations*, p. 5-14.

¹⁸ *Ibid*, p. 5-22.

¹⁹ More can be read on the *tâche d'huile* technique in Robert Asprey's *War in the Shadows: The guerrilla in history*, (New York: Morrow, 1994), pp. 150-157. Furthermore, this was the methodology used for Operation KALAY in Afghanistan 2009 by the Canadian Forces Stabilisation Company B (commanded by the author of this thesis) and will be explored in the Case Study further in this research.

²⁰ Department of National Defence, *B-GL-323-004/FP-003 Counter-Insurgency Operations*, pp. 5-23 – 5-28.

²¹ *Ibid*, chap. 7 and US Department of Army, Field Manual 3-24 *Counterinsurgency Operations*, chap. 3.

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²⁴ *Ibid*, p. 8-2.

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²⁷ US Department of Army, *Field Manual 3-07 Stability Operations*, (Washington, DC: HQ Department of the Army, 2008), p. Glossary 1.

²⁸ Christopher M. Schnaubelt (ed.), *Operationalizing a comprehensive approach in semi-permissive environments*, (Rome: NATO Defense College, 2009), p. 7.

 $^{^{29}}$ Understanding the contemporary operating environment is essential for all departments.

³⁰ Christopher M. Schnaubelt (ed.), *Operationalizing a comprehensive* approach in semi-permissive environments, (Rome: NATO Defence College, 2009), p. 54.

³¹ Sir Robert Thompson, *Defeating Communist Insurgency: The Lessons of Malaya and Vietnam*, (New York, NY: Praeger, 1966).

³² *Ibid*, p. 50.

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³⁴ *Ibid*, p.55.

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³⁶ *Ibid*, p.111.

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⁴⁰ David Kilcullen, *Three Pillars of Counterinsurgency*, Remarks delivered at the U.S. Government Counterinsurgency Conference at Washington DC (28 September 2006); available at http://www.au.af.mil/au/awc/awcgate/uscoin/3pillars_of_counterinsurgency. pdf [Accessed 27/03/2013].

⁴¹ *Ibid*, p. 2.

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⁴³ *Idem*.

⁴⁴ *Idem*.

⁴⁵ *Ibid*, p. 4.

⁴⁶ *Ibid*, p. 5.

⁴⁷ *Idem*.

⁴⁸ *Idem*.

⁴⁹ *Idem*.

⁵⁰ During pre-deployment training for Afghanistan we receive additional COIN training consisting of the 'Three Pillar' model from Kilcullen as it is

slightly more accurate and provides a visualisation that, in my opinion, is rather easy to grasp.

- ⁵¹ David Galula, Counterinsurgency Warfare: Theory and Practice, p. 70.
- ⁵² *Ibid*, p. 74.
- ⁵³ *Ibid*, pp. 74-79.
- ⁵⁴ *Ibid*, p. 75.
- ⁵⁵ *Ibid*, p.77 and also the 'isolation of the insurgents' is one of the themes in the Canadian Counterinsurgency doctrine.
- ⁵⁶ *Ibid*, p.79.
- ⁵⁷ *Ibid*, p. 80.
- ⁵⁸ Operation Kalay was an operation conducted in Afghanistan in2009. It was a village stability operation based on the ink spot approach using the shape-clear-hold-build-enable mode.
- ⁵⁹ US Government, *Interagency Counterinsurgency Guide*, (Washington, DC: Bureau of Political-Military Affairs, 2009).

Commemorating the Fallen for Friendship and Encouragement: The Commemoration of Fallen Soldiers in the Military Culture in the Baltic Sea Region 1919-1939.

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In 1934 a Swedish Second Lieutenant Grafström reported on the Estonian Cavalry Regiment's commemoration day in Tartu: "In the regimental grounds there was a memorial in the form of a cairn for those who fell in the war. Daily ceremonies took place when the units passed in the parade march with their heads turned. The memorial day of the Regiment, November 11, was commemorated with a memorial service and the taking of the communion together with the recruits. After the church service the Regiment rode through the city with torches, and formed a square around the memorial. In front was the banner and as many torch carriers as there were fallen soldiers faced the banner. The roll was called and the living answered. When a fallen soldier's name was called the adjutant answered that he had fallen in the war. A torch was extinguished and so the roll call went on squadron by squadron."

The picture conveyed by Grafstöm is characteristic of the kind of ceremonies held in memory of those who had fallen in the war among the new states in Europe during the period between the wars. Equally characteristic was that the ceremony, viewed by an outsider who witnessed the honouring of the dead, and was looked upon as an important feature of a foreign country's military culture that he had to report home about. The theme of this article is the practice of honouring of the dead and its national and international significance among the military powers of the Baltic States during the interwar period.

In modern times the armed forces are one of the state's most important instruments, and the most essential instrument in terms of international law and preserving the national territory and the sovereignty of the state. The armed forces are intimately connected with the state, both in a national and an international arena. The role of the armed forces in our society has ensured that they are embodied with a special military culture that has international similarities as well as national characteristics. A typical characteristic of this culture is a hierarchical attitude. Irrespective of the state ideology, the armed forces maintain a conservative attitude towards the role of the state and, accordingly, a special love of traditions. Through their culture and education the armed forces also convey a normative and idealised image of war and death. The importance of the history of the military culture makes it possible for this culture to be studied on the basis of what the social anthropologist and philosopher Ernest Gellner's typology called old states. This refers to states with a long historical continuity and a clear national identity and where the history plays a significant role in the military culture. However, even with what Gellner calls the newer states, the recent histories play a role in the military culture with the aim to strengthen the armed forces' own identity and to connect them with an international military culture.2 The intimate interconnection between the state, its creation, and armed forces in the new states also made the rituals and ceremonies created by the military become part of a national cult, in which combat and death for the nation and the commemoration of the fallen became the focal point. This cult was manifested in living practices in the form of parades and memorial services, and materially as places and monuments, and as a living memory through the teaching of history and the use of role models in military education. On the whole this cult has traits of what Eric Hobsbawm calls invented traditions, reborn and changing traditions claiming to be static and deeply rooted in history.3

In this article we study how death was depicted and used in military culture in Sweden, Estonia and Poland during the interwar period with the aim to identify the national characteristics of these states, as well as the traits created by a common military culture in connection with death. Sweden exemplifies what Gellner calls an old state, while Poland with its historical tradition and newfound independence exemplifies a reestablished state. Estonia, which lacked experience as an independent state, exemplifies a new state. These states to be examined formed at the same time different nodes in the security complex of the Baltic region and developed an intimate military interchange.

The study is based on three themes from different sources. In the first theme, military manuals and journals are examined, in the second theme military commemorations and monuments are studied, and finally in the third theme the position that the memory of the dead played in international relations is studied. This latter examination is based on the reports of the military attachés who witnessed the commemorations.

The Memory of the Great War

Death has always been an integral part of the military culture and has been central to its rituals, but it was from the French Revolutionary War in the late 1700s and early 1800s that thoughts about death and sacrifice for the nation came into clear expression. As such, this process was parallel to the growth of modern states as well as the development of mass armies and the concepts of citizenship. Death, in the form of the military hero, came to symbolise the male character, willpower, moral purity, courage and patriotism. Death was the ultimate sacrifice that the soldier and citizen was able to give for his country.4 The nation was quite often symbolised in the context of a young, immaculate woman or a mother with children in order to connect sacrifice to something real that traditionally would be protected.⁵ The military death became even more sacred during the interwar period by the military rites that borrowed features from the church, thus making it easily recognisable for the observers. 6 One of the reasons was that the military death during the First World War differed markedly from earlier wars. The fallen were no longer killed, but rather destroyed and pulverised by the modern industrialised war. Through rituals, feelings and actions were evoked that could only occur in a collective context and which created cohesion where history was as central as the present.⁷

At the same time history entered the public arena in the 1800s, which was embodied by museums, monuments and public commemorations, a culture to which Europe's new states were joined in the interwar period.8 On the continent monuments were erected to commemorate the dead of the district as well as the allied soldiers who died for the district, or in memory of a great battle. The local monuments tied the area or place to the nation, and in the new states it could also serve to distinguish the nation's borders or symbolise how far the battle had spanned the nation. Likewise, the memorials could also put the district or battle in an international context and commemorate foreign soldiers who had fallen on that spot.9 Even far from the battlefield, the memory of the dead had a national significance. Historian Jonathan F. Vance wrote that the memory of the war in Canada filled a need for comfort, explanation and inspiration, but also for entertainment.¹⁰ At the same time, the memory of the nation's victims could have a tremendous political force elsewhere. In Italy, for example, the fascist seizure of power was legitimised by claiming that the power should lie with those who risked and sacrificed their lives and fought for the nation. At the same time as the myth arose in Germany that the Fatherland's troops during the World War had been betrayed by the establishment it became a key message of the National Socialist propaganda.¹¹ In the Nazi myths the interwar SA men became the direct successors of the First World Wars fallen, with the expressed purpose of linking the past and the present and future.

Material

This study is based on archival material, military manuals and journals. The archival material consists of military attaché reports in which mainly Swedish and Polish attachés describe various ceremonies and commemorations that they visited as part of their service. The Swedish journal materials are from the *Ny militär tidskrift* for the period 1927-1939. This magazine was published exclusively for officers. There were also magazines that were geared towards non-commissioned officers (NCOs) and lower officers, called *Den svenske underofficeren* and the *Svensk underbefälstidning*. We have studied the journals for the years 1919-1939 and 1925-1939 respectively. The newspaper *Zołnierz Polski* (*The Polish Soldier*) was an

easy-to-read magazine that was directed towards conscript soldiers that was published between 1920 and 1939. The *Polish Zbrojna* (*The Armed Poland*) was the Polish armed forces' official magazine, which had the ambition of being a daily newspaper and was directed towards a broad readership. From 1919 on the military affairs in Estonia were addressed in the journal *Sõdur* (*The Soldier*), which was usually published once or twice a month and was a unifying body of information and debate on military matters, and also an important teaching tool. Generally, the purely military questions covered in the journal were dealt with in a high level of abstraction, making it likely that those sections of the journal were directed towards officers, while the news and historical sections often had a more general appeal and would have been read by the enlisted men and veterans.

The Armed Forces and Death

The education of the conscript armies of the early 1900s rested primarily on a verbal transfer of knowledge from officers and NCOs to the soldiers. But as the weapons and systems became more technically complex and more responsibility was placed on the NCOs and soldiers to independently handle equipment and to solve tasks, the number of printed manuals and instructions for training soldiers also increased. Weden introduced such manuals in the early 1900s, and they became more complete and detailed in the interwar period, while the first detailed instruction manuals in Estonia began to be issued in the late 1920s. In Poland, the printed instructions, however, were not as common because the literacy rate was low in most parts of the military, especially during the 1920s.

The soldier's instructions always gave death a large, if not explicit role. The Swedish soldier manuals for conscripts soldiers were generally structured around two themes; one about the military service and the other about general education, dealing with everything from soldier hygiene (not to spit on the floor), to how the national holidays were to be celebrated. In both parts, history had a prominent role.¹⁴ In the section dealing with the battle

death was usually hidden behind technically-oriented descriptions of the effects of weapons against enemies, instructions on how the individual soldier should aim their weapons, and stylized images of their own troops' advance through enemy lines, which were marked as coloured fields. In considering likely losses in war the attitude was that 'losses are inevitable' and that 'it took stamina, willpower, resourcefulness and courage to carry out the mission in a responsible manner.'15 The manual's sections that dealt with the assault were inspired by the tactics of the First World War's Western Front with the clear exhortation that, 'without the attack there is no victory.'16 The attack must be characterised by a strong spirit and a relentless quest to get close to the enemy, which would inevitably lead to losses. Yet these sacrifices would not be in vain or forgotten and soldiers were indoctrinated with references to the sacrifices of historical heroes.¹⁷ Those who were often extolled as heroes in the Swedish military honour culture were some of the warrior kings of Sweden, mainly Gustaf II Adolf and Karl XII. But in the 1920s there were also cautionary historical examples that described the soldiers who died to save the friends or to save the Swedish flag from falling into enemy hands.¹⁸

In the newly formed Estonian army proper instruction books for soldiers and officers were lacking, and the regulations that were developed over time primarily addressed issues like the maintenance of horses or individual weapons. In these manuals the reality of war was concealed behind reports of shot angles, the risks of ill-shod horses in the field, or techniques for digging trenches. The instructions provided by the manuals included articles about techniques, tactics and training that were also were mixed with easy to understand stories that highlighted the heroism and contribution of individual soldiers. The key themes expressed in the manuals were friendship, hardship and sacrifice. In these descriptions, death was never sudden or without purpose; instead, it was described as a consequence of heroism and sacrifice, and as the culmination of a phase where individual soldiers or units gained the victory. Through this connection death was for a good purpose, something that only affected their own troops and not the enemy. The descriptions of the Estonian War of Independence were the most prominent, detailed and personal accounts in which the same fight could be described repeatedly, but from

different perspectives. Similarly, the obituaries published in *Sõdur* of officers and distinguished soldiers who had recently passed away, or in memory of those who had fallen in the War of Independence, were also very descriptive. These highlighted the sacrifice and heroism just as the runes also highlighted that the struggle of those who recently passed away had borne fruit because the heroic veterans had died in an independent Estonia. Thus, the fallen were remembered in gratitude. In the latter case, the aim was always to show that no soldier's efforts would be forgotten. Similarly, officers and soldiers were portrayed as being awarded the Freedom Cross because heroism joined the portraits of the dead to the heroes at the same moment that the thin line between life and death in war became clear.¹⁹

The hero's gallery could also be inclined to show the Estonian officers as being blissful, especially if their efforts were for the same good cause. That is why, for example, Marshal Józef Piłsudski was portrayed in Sõdur at the celebration of the Polish National Day in 1927. As a reminder of those who sacrificed their lives for Poland the cover showed a picture of the Unknown Soldier's grave in Warsaw. 20 In other issues there were also descriptions and images of the representatives of the Estonian armed forces who laid wreaths at the Tomb of the Unknown Soldier in foreign countries. These documents showed respect and desire for friendly relations with foreign powers, at the same time as it sealed the common fate for which the soldiers died. As a result, these descriptions were used as examples and they clearly resembled the Swedish descriptions of heroism, with the main difference that the Swedish examples were historic. Designed to teach a lesson, they could therefore be used to emphasise heroic virtues and show their importance in history, but not to give real lessons about war and warfare.21

The Polish infantry instructions also emphasized the importance of sacrifice, but without specifically mentioning death. In these instructions, there were no seasons, weather or terrains that could prevent the Polish infantry 'who advanced to attack full of sacrificial patriotism, defying danger and bravely enduring all kinds of hardships and shortcomings.' The emphasis of their patriotic sacrifice and privation, rather than inflicting

damage to the enemy, was very similar in many respects to the Swedish and Estonian instructions.

The idea behind these stories was to make the instructions more educational and alive, but also to instil courage in the soldiers and the willingness to endure hardships because there was a reward in the future, namely the independent state. An important component of these illustrative examples was that they emphasised that a small country's heroism was so much greater than a large country's soldiers. A small nation's war always meant fighting for its existence, while a large country's war was described as a conflict of imperialist ambitions.²² There is also a link to this in the Swedish soldier's instructions where the struggle of the Thirty Years War was described as stopping the Catholic worldwide conspiracy. In the same spirit it was pointed out that Sweden, ever since the time of the Crusades, had defended Western civilisation against Russia.²³

Death as a Military Virtue

When the Polish military word 'Virtuti militari' was reintroduced in 1920, Marshal Pilsudski said that it was a rare luxury to live up to the military virtues of war, 'people dressed in soldier's uniform must go hand in hand with the love of his heart, with death.' Whoever drew the short straw had to resign themselves to die or become crippled and sick. Whoever drew the long straw could enjoy health and life.²⁴ More distinctly romantic notions of death can hardly be represented. The Polish soldier's masculinity was based on an unconditional commitment to take to the field in order to experience the life - and death - lottery.

There were many regimental days and anniversaries that were celebrated in the 1920s and 1930s that eloquently expressed the Polish military's concept of death. These were held under strict ritual forms. When the 8th Infantry Regiment 'Legionów' celebrated its tenth anniversary in April 1928, the festivities began with a mourning service for the 340 fallen soldiers and officers from 1919 to 1920.²⁵ The second day was celebrated with an outing to the Monument of the Fallen where a field service was

held. The names of the dead were read, and then the trumpeters at the monument blew a fanfare. Four soldiers dressed in the 8th Regiment's historical uniforms marched forward and presented arms jointly with the honour guard. The historical uniforms emphasised the ties with the past and showed that the soldier's role and responsibilities were eternal.²⁶ The day ended with a parade, dinner and a ball.²⁷

Remembrance of the dead was woven together with activities for the living such as sports and shooting competitions. These served to socialise the soldiers in a military culture of honour, duty and glory in parallel as their military competence developed.²⁸ During the same month the 14th Field Artillery in Poznań celebrated its regimental ceremony. It began in the evening with the batteries lined up in the square holding torches. The fallen soldiers' names were called one by one, and after each name the regimental commander exclaimed, 'he fell in glory on the battlefield!' Afterwards, there was a speech describing the fallen soldiers' graves as 'scattered around the country's eastern border - Kresy wschodie' and called the 'silent monuments' of loyalty to the native land.²⁹ The link to the kingdom's eastern border - Kresy wschodie-- was a very powerful symbol that referred to Poland as Christianity's true defender and its boundaries as the boundary between culture and barbarism.³⁰ The graves thus showed how far to the east the fight and the sacrifice for civilisation stretched, and also showed an imagined boundary from which it was impossible to withdraw without leaving those who died for civilisation in the lurch. The idea of civilisation's boundary was also present in the Estonian military culture and in the Swedish culture, where graves and monuments of Swedish soldiers in Europe gave witness to how far the Swedish fight for civilisation stretched and what sacrifices one historically was willing to make.

The Swedish ceremonies followed a different pattern than in Poland and Estonia since Sweden lacked immediate war experience. Thus, the Swedish ceremonies were historical and during the 1920s many regiments celebrated the 300th anniversary of their foundation with celebrations that were held according to a well-known template. The fallen soldiers of the regiment throughout history were celebrated through poetry, anchored in

the homeland and expressing the legacy that these soldiers lived on in the present.³¹ The emphasis was on Sweden's history as a great power and endorsing the Swedish warrior virtues aimed at counteracting the pacifist tendencies in society. When some regiments were disbanded in the period of disarmament after the First World War the military viewed it as denigrating the previous generation's sacrifice.³²

The Swedish ceremonies during the interwar period were all constructed to make historical events well known and to connect them to current political differences.

The main references to the time of great powers was seen through the example of the hero kings Karl XII and Gustav Adolf II, both who fell in spectacular ways in battle. Both kings also became the subject of their own festivals, both nationally and internationally. Gustaf Adolf II was hailed mainly from 1930 to commemorate the entry into the Thirty Years War, and was followed by remembrance ceremonies for Breitenfeld in 1931 and Lützen in 1932. The king's fate at Lützen personified the will to sacrifice and at the same time portrayed death's historical meaning. In this way, the stories remind one about the way in which the fallen soldiers and officers in Estonia's war of independence were portrayed.³³ Gustav Adolf's Day also gave rise to public ceremonies in Estonia and Latvia. These were followed closely by representatives of the Swedish armed forces, who interpreted them as signs of friendly Swedish-Latvian relationships. The memory of the Great Nordic War was also present in the Estonian military press, which often made references to the Estonians that died in the Swedish king's army and about the battles that were waged on Estonian soil. As a result, the Estonian soldier and his will to make a sacrifice in the war against the East received a historical continuity as well as also demonstrated how Estonia and Sweden shared a history and a historic task. Politically, this could be interpreted as an expression of Estonia's 'Scandinavian', i.e. a neutral orientation in an increasingly tense international atmosphere during the pre-war years.34

1928 was the tenth anniversary of independence for Estonia and was a memorable year for the armed forces in the newly formed states around

the Baltic Sea. Around 1928 many local monuments were dedicated in Estonia to honour the fallen soldiers of various districts. Many monuments were erected and paid for by the collections of local associations who organised commemorations for the fallen soldiers.³⁵ The purpose was not primarily to create a place of mourning, but a place of memory. Monuments were often portrayed, almost without comment, on the cover of *Sõdur*. Most of them consisted of tall stone pedestals with inscriptions and adorned by a struggling or falling soldier in bronze. Remarkably, these soldiers often carried historically symbolic swords or armour and these depictions embodied their death for the nation by holding up the banner in battle constantly striving forward. The Monument in Suure-Jaani, inaugurated in 1926, honoured not only the local fallen soldiers, but also the medieval Estonian national hero Lembit.³⁶

Lembit was extolled as a national hero because after his death in the freedom of the Estonian peasants was considered to have ended as the country fell under control of the Teutonic Knights. In an article in Sõdur, which was illustrated with the monument, it was explained that Lembit, like the soldiers in the war of independence, gave his life as a sacrifice to the nation.³⁷ The monument's historic/mythic references had the same function as the historical articles in journals, namely to link Estonia to an eternal struggle between good and evil, where the right always won in the end. Other monuments embodied the nation by reminding people that the soldiers died in defence of women and children, where the woman represented the home and the child the future. In the same way, school children and students play a prominent role at the ceremonies held at the monuments.³⁸

Parades Described by Foreign Guests

As described, the purpose of the rituals was to celebrate national independence and also the national historical roots. It was by paying tribute to the fallen soldiers that one created a visual context. The primary recipient of the message was that one's own nation should display its military power and the authority of the state. The rituals were also directed towards their own soldiers in order to socialise them into this context. But

the rituals and ceremonies were also directed outward. They were a meeting place where honouring the dead could be equated with showing respect for the nation, and the ceremonies were carefully studied by other armed forces in order to note the degree of connectedness between the states and people and how the armed forces lived up to the military virtues. The Swedish military attaché in Riga, Major Karl Lindqvist, provided a description of the Latvian National Day celebrations on 18 November 1937. The celebrations began on the afternoon of November 17 with worship at the War Cemetery in Riga. This was followed the next morning with a march of young students to the cemetery to lay a wreath at the Tomb of the Unknown Soldier. In this ceremony the president and members of the government were also present. The whole day was devoted to such arrangements. After the service in the morning the president spoke to the assembly from the parade site in Riga in a speech that was transmitted by radio across the nation. He spoke of the importance of an intimate unity between the people and the army. Parades took place in all the garrison towns and in the evening Riga was fully illuminated with the help of the fleet that lay anchored below the castle on the Daugava River.39

The fallen were commemorated in the celebration of the national solidarity. Having the students lay wreaths at the Tomb of the Unknown Soldier was a way to create a community where students became the links in the same chain as the fallen soldiers. The presence of students and school children' in Latvia, but also often in Estonia, symbolised the new state and its ideals with modernity through education, formerly granted to only a few, but now available to all people as a result of the sacrifices made by the fallen soldiers. For the attachés, these celebrations were a way to assess the national cohesion and the national military capacities. There was a distinct recognition in the rituals and the system that the ceremonies followed.

War cemeteries and the Tomb of the Unknown Soldier were generally part of military visits of all kinds. For example, the Finnish army chief, Lieutenant General Hugo Österman visited Estonia from 5to 12 July 1938, as a guest of Commanding General Laidoner. The visit began on 6 July

with the official laying of a wreath at the memorial of those who fell in the War of Independence.⁴⁰ Already in 1933 Österman had also laid a wreath at the Tomb of the Unknown Soldier in Warsaw in a similar manner as the Swedish naval officers who visited the Polish capital the same year.⁴¹ Exactly the same liturgy took place when the Polish General Staff Commander, General Wacław Stachiewiczs, visited Finland in July 1938. The visit began after an honorary reception at the airport runway, with the laying of a wreath at the War Memorial in the Old Cemetery. During this occasion the marching band played the Finnish and Polish national anthems.⁴² For the Polish attaché this commission was very much about sensing the mood in Finland as that country was a potential ally against the Soviet Union. Therefore, it was also highly important to assess the German strength and scope. This interest appeared especially in the reports of the tenth anniversary of the Independence War in 1928 when German Major General Rüdiger von der Goltz, visited Finland.⁴³ The Polish attaché Captain Marian Chodacki reported that the visit on 11 April, 1928 began with a mourning prayer for the fallen soldiers and wreaths were laid at the monuments of the dead. Even wreaths from the German organisations Stahlhelm and Jägerbund were laid down.

The day after there was a grand party where letters of gratitude were dispatched to various German patriotic societies. The implication of this was that one commonly sacrificed blood for freedom, for the defence of the Finnish nation and the Germanic culture. For the Polish, the observer signalled the honouring of the dead, where one shared the same view of friend and foe in the international system and a common historical heritage. But the careful honouring of German organisations also raised a concern about a too German-friendly Finland. That same year the Polish military attaché in Helsinki reported that the German graves in the Old Cemetery 'were considered to be the closest to the Unknown Soldier grave.' In the same year there were Polish attempts to identify Poles who died in the fighting against von der Goltz's intervention force to mark their graves. Witnesses were sought among the veterans in western Poland and some overtures appear to have been made to the Finnish government.44 The Polish correspondence expressed crass willingness to enter a Polish wedge in the Finnish-German celebration - and to mark the

Polish graves was seen as a way to 'reduce the importance of the monuments of these German units."⁴⁵ This indicates the power of the memory culture as a common denominator and a bridge builder between states. It is also symptomatic that the role of the Unknown Soldier's grave is mentioned - certainly there was no such memorial in Finland at the time of the reporting, but there was a place that filled its role.

There was a high degree of recognition among all soldiers in these contexts. But it seems as if there was another dimension in recognition between the Baltic States, Finland and Poland which was mainly the common experience of independence and civil war. A good example is the exchange between Finland and Estonia in 1927 that highlights the common link between the countries. The Estonian cadets visited Helsinki in 1927 and laid a wreath at a Monument for the Estonian Independence War for Fallen Finnish Soldiers. Finnish cadets did the same thing when visiting Tallinn. Estonian cadets were also present at the Finnish National Day celebrations when male and female students, the women dressed in white, waved to the parade heading to the war cemetery.⁴⁶

Something that one must also keep in mind is the international discourse of the time then public ceremonies were very common during the interwar period. In its most extreme form such ceremonies often took place in fascist Italy and Nazi Germany.⁴⁷ It is worth noting, however, that the honouring of the fallen slowed down rather than increased in Estonia after the establishment of authoritarian rule in 1934.⁴⁸

In the interwar period the Swedish victory over Russia in the Battle of Narva in 1700 was an important memory for the Baltic States and Finland. It came to be a symbol of how small states could fight and defeat the great Russian Empire. Thus, the Narva Monument had an international symbolic significance. On 18 October 1936, Sweden unveiled a Monument for the Victory at Narva in 1700 in the town of Narva. The monument was a bronze cast of one of the lions at Lejonbacken from the Royal Palace. Festivities included the laying down of wreaths, parades of the Swedish units that participated in the battle, with representatives from the Finnish Army and the Estonian army acting as hosts.⁴⁹ For Sweden it was

about preserving the memory of Swedish victories, but for Finland and Estonia it was about placing a sense of nationhood back in time. In Estonian journals the Battle of Narva was highly relevant. The victory in 1700 created a link between the modern war, the story of the battle and the independent Estonian soldier. His character and sacrifice was thus part of a long chain of historical events. Such historical achievements provided an opportunity to connect with memories and celebrations in other countries.⁵⁰

Celebrations of this kind were not always about an organised cult of death, but also about a military system built around honour. The ceremonies around the Fallen Soldiers filled a recognition function, especially when it came to the formal part of the rituals. Wreath-laying ceremonies at monuments were part of the military concept of honour and glory. But for countries such as Finland, Poland, Estonia and others, this was a step in the maintenance of common rituals where nation and death were linked with the history. In these cases, death was at the individual's level and the fallen embodied the nation. It was not to mourn but to remember. The memory of the fallen soldiers was a celebration of independence in itself made possible by their sacrifices.

Death as a national manifestation - a concluding discussion

The most striking features in the comparison between how death was regarded in military culture between the wars are the major similarities that exist. By comparing how the Fallen Soldiers and the memory of those are viewed in the different countries, a picture of an international military culture emerges, but with distinctive national features. One conclusion is that the ceremonies around death were used to demonstrate military determination. The rituals were, in fact, observed by military attaches, who informed their superiors about the military capacity, encoded in memory of the fallen.

To a large extent, everywhere people devoted themselves to orchestrate the military hero's death in the same way. However, there were some differences in what the rituals meant; in Sweden, the Fallen were anonymous ancestors whose sacrifices were used as tools against disarmament. The great Swedish war heroes were role models, not only in Sweden but also in Finland and Estonia. The big difference was between Sweden and the countries that recently had fought a war. The Fallen Swedish Soldiers became monuments without being specifically identified as individuals. In Poland and Estonia, it was about unnamed soldiers whose efforts and sacrifices would be remembered. In contrast to Poland and Estonia, the Swedish military hero's death was historic. In Poland, which had its own national history, the victims of the Polish-Bolshevik War and the independence wars became a modern form of the historical war hero. The Estonian government, which lacked national history, was characterised instead by a need to extend the story in time. For example, ceremonies around the memory of the Battle of Narva in 1700 also became the ceremonies for Finland and Estonia. This victory became synonymous with a win over Russia in the independence and civil wars.

The military ceremonies took on the role of a national temple where military and religious liturgy created a context and commemorated the fallen soldiers connected to the nation. The rituals were a visual manifestation of the nation in which participants would feel connected; and at the same time the rituals meant that the newly formed nations took their place among the other nations. Death was a way to justify the nation and the government. They all had the same traditions, the same rituals, and the ceremonies built around those who died. But the ritualised hero's death was also a way to keep the nation constantly mobilised. In Sweden this was done by highlighting individual victims. The international system that the ceremonies followed made them recognisable to different observers, but often the rituals developed specific national symbols. One example is the Polish use of Kresy wschodie, while Sweden made reference to a period of great power, and Estonia to the Battle of Narva.

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¹ The 2nd lieutenant of the Royal Norrlands Dragon Regiment A.F.W. Grafström med underdånig redogörelse, jämlikt go 2458/1933 tjänstgjort vid kavalleriförband i estniska armén den 13 juni 1934, (KrA, 200, EIg:74)

² Ernest Gellner, *Nations and Nationalism* (Ithaca New York, 1983) pp. 88–101.

³ Eric Hobsbawn, 'Introduction: inventing traditions', in Eric Hobsbawn and Terrance Ranger (eds.), *The Invention of Tradition* (Cambridge, 1983) p. 6f.

⁴ Anders Ahlbäck, Soldiering and the Making of Finnish Manhood: Conscription and Masculinity in Interwar Finland, 1918–1939 (Åbo, 2010) p. 11f; George L. Mosse, The Image of Man: The Creation of Modern Masculinity (New York, 1996). historisk tidskrift 131:3, 2011; Adriana Cavarero, In Spite of Plato: A Feminist Rewriting of Ancient Philosophy (London 1995) s. 15–30, Alan Forrest, "Citizenship and masculinity: the revolutionary citizen-soldier and his legacy", Stefan Dudink, Karen Hagemann and Anna Clark (eds.), Representing Masculinity: Male Citizenship in Modern Western Culture (New York, 2007) pp. 111–129.; George L. Mosse, Fallen Soldiers: Reshaping the Memory of the World Wars (New York 1990); See Kallas and Sturfelt (2008) kriget som hjältesaga, pp. 75–108.

⁵ Maurice Agulhon, "Politics, images and symbols in post-revolutionary France", Sean Wilentz (ed.), *Rites of Power: Symbolism, Rituals and Politics since the Middle Ages* (Philadelphia, 1999) p. 179; Johanna Valenius, *Undressing the maid: gender, sexuality, and the body in the construction of the Finnish nation* (Helsinki, 2004) p. 68; see also Joan B. Landes, *Visualizing the Nation: Gender, Representation, and Revolution in Eighteenth-Century France* (Ithaca and London, 2001).

⁶ See Michael Sledge, *Soldier Dead: How We Recover, Identify, Bury and Honor Our Military Fallen* (New York, 2004).

⁷ Randall Collins, *Interaction Ritual Chains* (Princeton 2004) pp. 47–49; Lars Dahlgren and Bengt Starrin, *Emotioner, vardagsliv och samhälle: en introduktion till emotionssociologi* (Stockholm 2004) p. 57.

⁸ Magnus Rodell, *Att gjuta en nation: statyinvigningar och nationsformering i Sverige vid 1800-talets mitt* (Stockholm, 2002).

⁹ Jay Winter, Sites of Memory, Sites of Mourning: The Great War in European

Cultural history (Cambridge 1995); B. C. and M. W. Stark Mossman, *The Last Salute: Civil and Military Funerals 1921–1969* (Washington, 1991) p. 15; see also K. S. Inglis, "Emtombing unknown soldiers: from London and Paris to Baghdad", *History and Meaning*, 5/2 1993.

¹⁰ Jonathan F. Vance, *Death so noble: memory, meaning and the First World War* (Vancouver, 1997) pp. 9, 229–236.

¹¹ Madeleine Hurd, "Klädd till gatustrid: uniform, kropp och maskulinitet hos nazis- ternas stormtrupper", Madeleine Hurd, Tom Olsson and Lisa Öberg (eds.), *Iklädd identitet: historiska studier av kropp och kläder* (Stockholm, 2004) pp. 233–245; See Thomas Kühne, *Kameradschaft: die Soldaten des nationalsozialistischen Krieges und das 20. Jahrhundert* (Göttingen, 2006).

¹² Ahlbäck (2010) p. 11.

¹³ See also, *Soldier Instructions for the Infantry, 1918 edition (SoldI Inf)* (also published in 1919, 1920 and 1922), *SoldI Inf,* 1927 edition (also published in 1929) and *SoldI Inf,* 1938 edition. There are also specific instructions for different types of weapons, individual weapons, horses, vehicles and also general subject areas with defence information and such.

¹⁴ SoldI Inf, 1918 edition, p. 42, 31; SoldI Inf, 1938 2nd ed. p. 209; 32. SoldI Inf, 1918 edition p. 151; 33. Fredrik Eriksson, 'Men of war should fear God and be gentle and faithful to the King: the use of history in Swedish soldier instructions in the interwar period' in *Militärhistorisk tidskrift 2009–2010* (2011).

¹⁵ SoldI Inf, 1938, p. 209.

¹⁶ SoldI Inf, 1918, p. 151.

¹⁷ Eriksson (2011).

¹⁸ SoldI Inf, 1927 edition, describes how a 15 year old youngster named Brakel raised the flag as a sign of resistance at the Battle of Porraslmi in 1789 and the Swedish soldiers then succeeded in ousting the Russian opponents. On the significance of the flag and its meaning see p. 14.

¹⁹ *Sõdur*, no. 16/17, 23/4 1928 p. 378; *Sõdur*, no 28, 3/7 1926 p. 591; *Sõdur*, no 46/47, 6/11 1926 p. 1012; and *Sõdur*, no 6/7/8, 24/2 1928, p. 259.

- 20 $S\~odur$, no 18/19, 7/5 1927 p. 425, 439; $S\~odur$ no 6/7, 24/1 1934, p. 195.
- 21 $S\~odur$, no 16/17, 23/4 1928 p. 378; $S\~odur$, no 28, 3/7 1926 p. 591, $S\~odur$, no 46/47; also Eriksson (2011).
- 22 $S\~odur$, no 9/10, 14/3 1928, pp. 386, 393; Also $S\~odur$, no 24/26, 20/7 1936, p. 597.
- ²³Eriksson (kommande).
- ²⁴ Zołnierz Polski 1920:87 p. 2.
- ²⁵ The name 'Legionów' relates to the Polish Legion whose soldiers fought together with the Triple Alliance (under Austrian-Hungarian leadership) to liberate Poland from Czarist Russia, thus an honorary designation.
- ²⁶ For an analysis of these rituals, see Ralph E. Giesey, "Models of rulership in French Royal ceremonial", in Wilentz (1999) pp. 41–62.
- ²⁷ Zołnierz Polski 1928: 25 p. 522.
- ²⁸ Thomas Sörensen, *Det blänkande eländet: en bok om Kronprinsens husarer i sekelskiftets Malmö* (Malmö 1997) pp. 80–86. See also Thomas Sörensen, *Sista striden: de Mörnerska husarerna vid Bornhöft* (Hallstavik, 2004).
- ²⁹ Zołnierz Polski 1928: 25 p. 523. Samma form av ceremoni omkring ordern Virtuti Militari återgavs i 7. ulanregementets "Lubelskych" firande 1928, se Zołnierz Polski 1928: 16 p. 322.
- ³⁰ Lucja Kapralska, *Pluralizm kulturowy i etniczny a odrebnosc regionalna Kresów poludni- owo-wschodnich w latach 1918–1939* [Kultur- och etnisk pluralism och regionala särdrag i de sydöstra gränstrakterna 1918–1939] (Kraków 2000) pp. 7, 68, 84–86.
- ³¹ *Den svenska underofficeren*, no. 16 18/8, 1924 p. 453. Between 1924 and 1926 the regiments at Kronobergs, Norrbottens, Dalregementet, Smålands Hussars, Värmlands, Life Guards, Västgöta, etc. also celebrated their 300th anniversary.
- ³² Den svenska underofficeren, no 16, 18/8 1927 p. 313f. 40; Den svenska underofficeren, no 21, 3/11 1928, p. 488.
- ³³ *Ny militär tidskrift*, no. 19–20, November 1932, pp. 277–280.

³⁴ Number 116, message no. 25, from the military attaché in Riga to the head of the Defence staff Intelligence Department, 9 November 1937. Archive number 206, Fst/foreign, BI: 2 file 2 1937, KrA.

³⁵ ERA. 14.11. 277–313.

³⁶ *Sõdur*, no. 28/29, 16/7 1927 p. 989; *Sõdur*, no. 46/47, 6/11 1926, p. 989; *Sõdur*, no. 10, 12/3 1927.

³⁷ Sõdur, no. 28, 3/7 1926, p. 577.

³⁸ Sõdur, no. 18, 2/4 1927; 9/10, 14/3 1928 p. 386, 389; Valenius (2004).

³⁹ Number 133, message no. 23 from the military attaché in Riga to the head of the Defence Staff's Intelligence Department, 23 November 1937. Archive number 206, Fst/foreign, BI:2 file 2 1937. KrA, and Number 299, message 49 from the military attaché in Riga to the head of Fst/ und, September 1938. Archive number 206, Fst/foreign, BI:3 1938, KrA, about the officer's exam at the Latvian Military School where a similar ceremony at the war cemetery took place.

⁴⁰ Number 215, report no. 16/1938, from the military attaché in Riga to the head of the Defence Department 14/7 1938, Archive number 206, Fst/foreign, BI:3 1938, KrA.

⁴¹ Sztab Glówny 616/157, AAN, 28/7 1934, Warszawa, II department to the attaché in Riga, Tallinn and Stockholm; "Sprawozdanie kdr.ppor.dypl Stokłasy Tadeusza w stazu we flocie szwedzkiej odbytego w czasie od 15. V. do 20.VI.1934" and AAN, Sztab Glówny 616/318, "Wwa 8 Nov 1933, Sprawozdanie z pobytu w Polsce generala Oestermana, glównodowodzacego armja finlandzka w czasie od 28 X – 1 XI 1933" [Description from the Commander Captain of 2nd degree, Tadeusz Stokłasas, regarding his military service in the Swedish Navy 15/5–20/6 1934 and report about his visit to Poland by the Finnish General Österman between 28/10 and 1/11 1933].

⁴² L.dz.153/38 report from the military attaché Colonel Wladysław Łoś in Finland to the General Staff's intelligence department in Warsaw, Attachment 13, HB 02.07.1938, Centralne Archivum Wojskowe [Central Military Archive] (CAW), I.303.4.7184.

- ⁴³ General Major von der Goltz was head of the so called Baltic marine Division that supported the White side in the Finnish Civil War. In 1919 he was active as a leader of German volunteer and White Russian units in the independence wars in Latvia and Lithuania.
- ⁴⁴ L.dz.182/28 report from the military attaché Captain Chodacki to the General Staff's 2nd Division in Warsaw, 15/3 1928, CAW, I.303.3956.
- 45 20 December 1928 [probably referred on 20 December 1927], Finnish, Captain Chodacki to the $2^{\rm nd}$ Department; 29 May 1928, Finnish Captain Chodacki to the head of the $2^{\rm nd}$ Department.
- ⁴⁶ Sõdur, nos 20/21, 21/5 1927 pp. 477, 485. It was common in Finland that the fallen soldiers were buried in their homeland both during the Civil War and during the Second World War, Ilona Kemppainen, *Isänmaan uhrit:* sankarikuolema Suomessa toisen maailmansodan aikana [Sacrifice for the Native Land: Heroic Death in Finland during the Second World War] (Finland, 2006) pp. 261–264.
- ⁴⁷ George L. Mosse, *Masses and man: Nationalist and Fascist Perceptions of Reality* (Detroit, 1987), pp. 104–118; and Ingemar Karlsson and Arne Ruth, *Society as Theater: aesthetics and politics in the Third Reich* (Stockholm, 1983). Even in the Soviet Union different types of celebrations became rituals, such as celebration of the defeat of capitalism. See James von Gelder, *Bolshevik Festivals* 1917–1920 (Berkeley, 1993).
- ⁴⁸ *Sõdur*, no. 5/6, 10/2 1934, pp. 133; and *Sõdur*, no. 10/13, 10/10 1936 p. 1013.
- ⁴⁹ *Den Svenska underofficeren* no. 21, 3/11 1936 p. 582.
- ⁵⁰ Sõdur, nos. 24/26, 20/6 1936, p. 660.

Baltic Region Energy Security—The Trouble with European Solidarity

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The integration of the European Union (EU) is a constant process and is related to all dimensions of the organization's functional areas. This integration is a critical process to improve the internal cohesion of the entire EU and also to improve the security of all members based on sharing responsibilities, resources and supporting each other in other ways. The "Old" Europe has a long history and has long experience in developing a variety of EU policies, but for relatively new members it is still important to integrate within the Union to experience all the advantages related to membership. The independence enjoyed by Estonia, Latvia and Lithuania, the three so called Baltic States, is relatively recent, just over two decades old. In looking to adapt to the new realities these states viewed joining the EU as a strategic goal and attainment of EU membership was also related to addressing security challenges. Among many areas of concern for the region one of the major challenges has been to establish a concept of energy security. This is a highly complicated matter as it must take into account past relations and circumstances that include economic and energy interconnections.

Energy is currently a very powerful asset for supporting national economic development. Economic growth requires energy, but attaining stable growth can be difficult for small nations without their own natural resources as small nations are especially vulnerable if the economic instrument of power is employed against them. This is the situation for Estonia, Latvia and Lithuania today, although it should be noted that the EU and EU states are involved in settling regional concerns so that

economic stability can be maintained. However, there are also national interests and priorities that complicate a collective approach to the issues. Much has been done, but more progress is required in order to achieve independence and integration with the EU market in the energy domain. Progress must be based on cooperation, a regional approach that takes into consideration the respective nations' internal situation, and recognizes the national desires to have some autonomy within the system. The energy supply and distribution system also includes the need to enhance other land connections between the Baltic region and the rest of Europe in order to speed up economic development and to boost trade.

This article describes the energy challenges of the Baltic region energy and the role of the EU in the energy domain. It discusses energy dependencies and how the energy is currently delivered to the Baltic region and reviews the national situations concerning oil, natural gas and electricity supplies. One must also recognize the role of Russia, which is seen as a highly dominating actor in energy issues. The article will introduce some alternative ideas towards solving the energy question. There is room for greater bilateral cooperation in several areas. For example, Estonia has close historical relations with Finland, and Poland is a natural partner for Lithuania in energy matters. This article presents the idea of building a regional infrastructure to integrate the EU energy market with Estonia, Latvia and Lithuania both via Finland and Poland. One must also address the need to develop land lines of communication, namely Via Baltica and Rail Baltica. The article will provide some conclusions about the energy challenges and options in the Baltic region. The individual energy needs of every country need to be recognized, but there is also a need for wider neighbourhood and trans-regional cooperation.

The Regional Challenges

The discussion about the EU's approach to a free energy market is among top agendas that aim to ensure that, "no EU Member State should remain isolated from the European networks after 2015." However, it is also recognized that the Baltic States, "are not yet properly integrated into the wider energy networks of the rest of the EU" creating European "energy island." So there is an urgent

need to improve the security of energy supplies in the long-term perspective, to diversify energy providers, and to recognize options for renewable energy that will support the economic development of the respective countries. The implementation of the well-functioning energy market is linked with recognized flagship projects, namely3: monitoring the implementation of the Baltic Energy Market Interconnection Plan (BEMIP), sharing the best practices of regional cooperation of BEMIP with the EU Eastern Partnership countries, and extending the Nordic electricity market model (NORDEL) to the three Baltic States. Those projects could be supported by investments into regional infrastructure to facilitate lasting solutions. Another priority area is related to better utilization of renewable energy sources, e.g. biofuels, offshore wind, and promoting the enhanced efficiency of available energy to reduce energy use. The BEMIP is the core project and was created in 2009 and aimed to improve integration of the energy market of all the countries surrounding the Baltic Sea. It focuses on such energy sources as oil, electricity and gas.

The main idea of the EU is to create common solutions based on sharing capabilities in order to face the challenges created by current and future risks. The EU approach is closely linked with integration of the projects based on the will of countries to plan and execute them. It is also related to common energy policy, as this is an area of critical importance and vital for every nation and every region of the EU, in the framework of the common European Energy Policy. The policy is to answer a challenge which Europe cannot face alone because of lack of resources to cover all needs. Thus, cooperation with other actors, especially energy producers, is a necessity. The problem is especially important for those nations that are relatively new EU members and suffer from a reliance on limited number of suppliers and a poor infrastructure. The three Baltic states belong to this group and resources and the key issues of economic growth are a cause for concern for the EU as a whole as well as the Baltic States.

Fig. 1. The 2009 Map of the Baltic Energy Market Interconnection Plan (BEMIP).



Source: BEMIP project map June 2009, the European Commission's Directorate-General for Energy, http://ec.europa.eu/energy/infrastructure/bemip en.htm accessed: 08 May 2013. Copy rights according to EU Commission Decision of 12 December 2011 on the reuse of Commission documents (2011/833/EU).

The natural resources are not only related solely to the economy. They can and will in the future be used to support the political, military and civil instruments of power. Examples of using energy as political leverage can be seen in Europe and other parts of the world where gas and oil supplies are used as a means to apply pressure to nations. Currently "the Baltic states need to bear in mind that it is not Russian energy per se that is the problem, but the fact that an over-dependence on it has potentially uncomfortable political implications."⁴

The Russian - Ukrainian gas crisis of 2009 still weighs on the minds of regional leaders and makes them aware that the risk to supplies is a real one. Such the risk is also connected with oil and electricity and can only be overcome only by building new infrastructure. The crisis of 2009 also reminded Russia about the need to preserve the continuity of supplies of gas to the West Europe and presented the transit countries with some tough questions about Russian reliability. In addition, the whole issue is tied to the high prices of both gas and transit charges. Russia, in building the North Stream and investing in the South Stream, made a classical pincer movement so that it could successfully avoid potential economic conflict with current transit nations. Such the development also calls to question the EU projects linked to enhancing supplies from other regions, e.g. Central Asia and Caucasus. Again, the Baltic region is vulnerable in that dimension and there are no easy and quick solutions. At the same time, energy is also a test of the solidarity and cohesion of the EU and correspondingly of the three nations, so when requesting a consolidation of their efforts all of them must think in terms of regional partnership rather than in purely national terms.

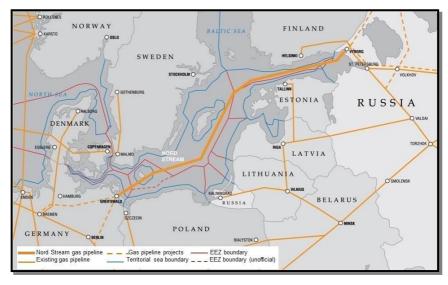


Fig. 2. Major Gas Pipelines Supplying Gas from Russia to Europe.

Source: Europe Embraces Nord Stream Expansion, the Natural Gas Europe 19 April 2013 www.naturalgaseurope.com http://www.naturalgaseurope.com/europe-embraces-nord-stream-expansion accessed: 28 May 2013.

"Europe has awakened" was the result of the Russian – Ukrainian gas crises and as a result the EU adopted the Third Energy Package in 2009, which aimed to speed the creation of a united EU energy market by eseparating natural gas transit and distribution networks to reduce the monopoly power of energy companies; diversifying sources of gas supply; linking European gas grids; expanding gas trading hubs and integrating gas storage facilities with them; and finally connecting the Baltic electricity networks with those of the Nordic countries, Poland, and the entire EU. The focus of the Package is on natural gas and electricity as the situation in oil sector is much better compared to other energy resources. Lithuania was the first country to sign on to the project followed by other two Baltic countries. In terms of relations to the Baltic States the energy security issues present a problem of crafting a deliberate EU policy as there is a lack of a strong

and agreed position and there is also a lack of internal cohesion as well as contradictory priorities of countries member regarding the European Energy Policy. It is also recognized that, "this uncertainty is all the more problematic for Member States dependent on one single gas supplier."7 This is precisely the case of Estonia, Latvia and Lithuania, but also of Finland. The energy dilemma forces the need for thoughtful and long-term solutions. "There are obstacles which continue to prevent both the economy and European consumers from fully benefiting from the advantages of opening up the gas and electricity markets. Ensuring the effective implementation of the internal energy market According to studies to recognize optional and thus remains crucial."8 alternative scenarios such problems must be solved in the coming years. Moreover, the economy- driven solutions are not always the only desired and rational alternatives as politically driven options, based on regional and national energy security needs, also have to be considered in meeting national priorities.

The Baltic Region as an 'Energy Island'

The Baltic nations are facing considerable challenges connected with energy as they mainly rely on one supplier and they do not have an intraregional infrastructure that could link them with alternative source in the nearest future. Moreover, even existing pipelines are co-owned by Russian companies, which complicate the overall picture. Estonia9 has no conventional oil or natural gas deposits, so receives supplies in transit from Russia using sea lines of communication exporting some 300,000 barrels per day (bbl/d) of refined petroleum products via major seaport of Muuga and other ports. However, Eesti Energia or Enefit produces "more than 1 million barrels of shale oil per year"10 as the country has large reserves of oil shale (some 3,800 Mt)-- enough for some 50 years of development. Currently the Eesti Põlevkivi mine annually provides 12.5 Mt of the oil shale, which "is used as the principal fuel for regional power plants owned by Narva Elektrijaamad''11 providing about 90% of Estonia's electricity. Additionally, the Eesti Energia Narva Power Plants "exports electricity to the Baltic States and supply electricity to the Nordic power market through the Estlink undersea cable"12. So Estonia has a surplus of electricity production, which is also a source of national income. In other categories Estonia relies on external supplies.

Currently, the consumption of oil is rising compared to a drop in gas category. To meet requirements the production of petroleum liquids from oil shale is planned to be increased and there is great interest in increasing electricity volume coming from renewable sources, which is also linked with EU requirements and the protection of the natural environment. The only challenge is related to the pollution linked with shale oil processing, as there are strict requirements referring to guidance provided by the EU Climate and Energy Package.

The development of renewable energy options is rather impressive as "in 2007, the share of electricity generated from renewable sources was only 1.5% of total electricity consumption, but in 2011 it was 12.7%. The growth was due to the expansion of existing wind parks and the commissioning of new wood fuel-based CHP plants."¹³ This is closely related to the pragmatism of the society and the goal is to reach "by 2020 to 20% of final consumption of electricity, which is the upper limit of that kind of co-generation."¹⁴ The adopted national Electricity Market Act "defines renewable energy sources as water, wind, sun, waves, tides, geothermal energy, gas from landfills, gas from waste water treatment, biogas and biomass."¹⁵ At the same time, "Eesti Energia's strategy is founded on extracting value from oil shale reserves and developing the technology needed to do that"¹⁶ to maximise company's contribution to national energy security.

Table 1. Consumption of Gas, Petroleum and Electricity in Baltic Region.

| | Estonia | Latvia | Lithuania | Finland |
|--|------------------------------|----------------------------|----------------------------|--------------------------------|
| Gas consumption (Billion cubic metres) | 0.7 (2010) 0.62 (2011) | 1.7 (2010) 1.71 (2011) | 3.1 (2010) 3.3 (2011) | 4.7 (2010) 4.1 (2011) |
| Petroleum consumption (Thousand Barrels per Day) | 26.14 (2011) 27.81 (2012) | 35 (2011) 31.34 (2012) | 60 (2011) 70 (2012) | 204.79 (2011) 193.27 (2012) |
| Electricity consumption (Billion Kilowatt- hours) | 7.48 (2009) 7,95 (2010) | 6.33 (2009) 6.56 (2010) | 9.48 (2009) 9.24 (2010) | 78.19 (2009) 84.83 (2010) |

Source: Created based on data provided by: Analysis by Country, The U.S. Energy Information Administration (EIA), Washington data updated as of February - March 2013, http://www.eia.gov/countries/accessed: 17 April 2013 and Analysis of Costs And Benefits of Regional Liquefied Natural Gas Solution in the East-Baltic Area, Including Proposal for Location and Technical Options Under the Baltic Energy Market Interconnection Plan, Final Project Report Booz & Company, Milano 20 November 2012, p. 9. accessed: 17 April 2013.

http://ec.europa.eu/energy/infrastructure/doc/20121123 lng baltic area report.pdf

A more complex situation is related to natural gas as there is a shortage of that important asset and long winters are causing an increasing need for that commodity. A solution first requires an assurance of continuity of supplies and next the development of infrastructure, including gas storage facilities. The solution could be linked with the newly created gas pipeline by German E.ON, BASF and the Russian GAZPROM on Baltic Sea bottom. But Estonia was opposed to building an extension of the current twin Nord Stream pipeline system using the national exclusive economic

zone (EEZ) waters, although the decision was considered to be feasible from economic point of view. However, such a decision would have considerably strengthened the reliance on Russian gas and would call into question other options such as LNG terminal or other gas pipelines that could diversify supply and combat the current dependency. Moreover, from a security point of view, it could "in the long-term perspective offer Russia a justification for increasing its military presence in the region with the purpose of monitoring or defending strategically important infrastructure with naval vessels or helicopters. In addition, the possibility cannot be excluded of military exercises being conducted in the immediate vicinity of Estonia on the basis of a scenario involving the protection of the pipelines." Such a situation is unacceptable for the Estonian government which could cause a potential "energy encirclement" and it is also a long-term challenge shared with other countries as energy issues must be faced together if one is to achieve the desired national and regional endstate.

Latvia is heavily dependent on Russia as supplier, having only some minor production of liquid fuels and hydropower electricity. She has also been a transit route for Russian oil exports that use the Baltic Sea Ventspils oil terminal. However, the opening of the Primorsk oil terminal connected with the Baltic Pipelines System (BTS) has changed that reliance. In short, "Latvia essentially lost its indispensable role for transit of Russian crude oil and, consequently, its leverage to compensate for dependency on Russia's energy supplies." Still the main volume of oil and oil related products to Latvia are supplied from Russia and this situation will continue in the near future.

In general, gas covers some 30% of Latvia's energy needs and the country is linked with Lithuania through the Kiemenai gas grid and is linked to Estonia via the Kauksi and Korneti gas grids. Latvia also operates region's only underground natural gas storage facility in Incukalns, which is a stability factor as it "has a maximum capacity of 4.4 billion m3 and as much as 2.3 billion m3 of immediately available gas." The planned extension of capacity to 6.2 billion m3 will increase the regional importance of the facility because, using the future Baltic Connector, gas could even transit to Finland via Estonia. The gas storage supported by the central location of Incukalns and pipelines that secure a link with Estonia and Lithuania and provide the

ability to support these countries during peak consumption periods. The situation is complicated to the fact that "Latvia's Latvijas Gāze is partially owned by Gazprom (34%) and German E.ON (47.2%) as well as by Itera Latvija (16%)"²¹, which is one of the concerns for Latvia's Ministry of the Economy in the long term perspective.

The decommissioning of the Lithuanian Ignalina nuclear power plant in 2009 complicated the electricity delivery situation and "Latvia has effectively remained a part of the Russian 'energy mainland" and is still connected to the Russian electricity transmission system in a similar way to its neighbours. Regarding electricity, Latvia also uses renewable sources: hydropower, wind, biomass and waste, peat, thermal sources which cover some 35% of the national needs. Riga is very interested in the BEMIP and a single market for the Baltic Sea region and in inter-country connections. For Latvia the situation is currently rather complicated as it is significantly relies on external supplies of all the energy resources, and Latvia is currently linked with Russia as a monopoly and also co-owner of the infrastructure. The energy infrastructure linking Latvia with the EU and reducing that reliance could help the country to improve energy security and it also might help in Latvia's internal affairs considering the Russian compatriot policy.

Similarly to the other Baltic States, Lithuania relies on crude oil and liquid fuels, natural gas, and also coal, from Russia. Closing the Ignalina nuclear reactor influenced the balance of energy resources the need to rely more on energy imports, import, mainly from Russia, but also from Estonia, Latvia, and Belarus. The plant closing also has political implications and "Lithuanian authorities assume that by 2020 Lithuania's energy production will increase from 14% to 50% of its own usage, and only that may reduce energy dependence on Russian supplies, which is estimated to be at 80% at present." So the energy problem is expected to influence the nation in coming years and the creation of a separate Ministry of Energy in 2009 proves that Lithuania understands the complex nature of the problem.

In a way similar to its neighbours, most of Lithuania's oil and all of its natural gas come from Russia. At the same time some refined products are

imported from Estonia and Latvia, as Lithuania has only a regional refinery in Mazeikiai. Currently, one of the main suppliers of energy is the Elektrėnai gas power plant, so gas consumption increased significantly up to 3.3 bcm in 2011 as presented in the table. As Lithuania is disconnected from EU energy market and is only connected with Latvia, using the Kiemėnai gas grid, and with Belarus, using the Kolovka gas grid. So the infrastructure- related concerns are very complex. Latvia has created an opportunity for monopolist practices. The gas supplies are influenced, according to Tomas Janeliūnas from Vilnius University, by a few facts: the only gas supplier is Gazprom; Gazprom controls the gas pipeline Minsk–Vilnius–Kaliningrad and it is an important stockholder of the Lietuvos Dujos. In addition, there is a lack of gas storage facilities and the capability to supply and store LNG²⁴.

The fragility of gas supplies was recognized in February 2004, when supplies were disrupted following Russian—Belarusian economic disputes and in July 2006, when part of the Druzhba Pipleine that delivered oil to Mazeikiai — the only regional refinery - was stopped. It was a real concern as it "looked, sounded, and felt' like political and economic retaliation against the privatization of Lithuania's Mazeikiai refinery by Poland's PKN Orlen, which had prevented a Russian takeover." The monopoly practices again showed the fragility of gas supplies when "in 2012, Gazprom flexed its monopolistic muscles by charging Lithuania \$497 per thousand cubic meters (tcm) of natural gas—over 15% higher than the \$431.30 it charged Germany." This action was directly connected as a penalty for Lithuanian support of EU directives that aimed to reduce "Gazprom's monopoly power and prepare for a unified EU energy market by the end of 2014" and to disconnect the gas transmission pipelines from AB Lietuvos Dujos.

LATVIA Mažeikiai Naujoji Akmenė Joniškis Biržai Kuršėnai Telšiai **Pakruojis** Palanga Plungė **Pasvalys Šiauliai** Klaipėda Radviliškis Rietavas Gargždai Seduva Panevėž Visaginas Utena • Šilalė Ramygala Kėdainiai Šilutė Ukmerge Taurage • Jurbarkas Jonava Širvintos Šakiai **Jauniūnai** Kaunas Kaišiador Nemenčinė Kazlų Rūda Elektrenai BELARUS Prienai Vilnius KALININGRAD REGION OF RUSSIAN FEDERATION Marijampolė Šalčininkai Alytus POLAND Druskininkai Gas transmission pipelines Gas distribution stations (projected) Major towns connected to the natural gas Major gas distribution pipelines system Towns connected to the natural gas M Gas metering stations system Towns not connected to the natural gas C Gas compressor stations system Gas distribution stations Gas pipelines (projected) Gas system controlled by other companies

Fig. 3. The AB Lietuvos Dujos Company's Natural Gas
Transmission and Distribution Net.

Source: The Website of the AB Lietuvos Dujos

http://www.dujos.lt/index.php/business-clients/gas-transportation/gas-transmission-distribution-system/45512 accessed: 28 April 2013.

What is important is that the AB Lietuvos Dujos foreign stakeholders, as of 31 December 2012, are OAO Gazprom (37.1%) and E.ON Ruhrgas International GmbH (38.9%). Only 17.7% shares are owned by the Lithuania Ministry of Energy.²⁸ What is noteworthy is that Lithuania is still used as transit route to deliver gas to the Kaliningrad Oblast. Having in mind energy leverage, Lithuania is currently planning to build modern nuclear plant in Visaginas and also a new Liquefied Natural Gas (LNG) terminal. This is why Klaipeda and Butinge sea ports are important facilities for delivery of oil and gas in the future. Additionally, the electric power grid is supposed to be renewed. What is interesting is that the Butinge oil terminal was built after Russian blockade in 1990s and it was commissioned in 1999, "and has the 91.5 km crude oil pipeline connection with ORLEN Lietuva Refinery in Mažeikiai."29 Such investments are a necessity as economy is overcoming the economic crisis of the last years and the demand for energy is slowly growing. What makes Vilnius a crucial player is its land link with the EU as Lithuania borders Poland and has the largest consumption of energy among the Baltic States, which is due to the size of country and number of people.

In general, the Baltic region is still heavily reliant on energy sources provided by Russia and the situation is linked with lack the infrastructure for any other option. The situation is not the same in all the nations, as Estonia has oil shale to cover significant part of needs related to oil, gas and electricity. It is giving the nation more flexibility and time to complete long-term solutions. Latvia and Lithuania are in more complicated situation, and their reliance on external supplies is the major problem. What is significant, the lack of infrastructure to deliver gas and electricity is limiting short-term options. Among them, the reliance on external gas is the biggest challenge as there are no possibilities to use other existing infrastructure, as there is lack of gas pipeline and LNG terminals. Next, all the three countries are connected to "the Russian electricity grid, but the market and management of the system is not consistent with EU requirements" and the need to change existing situation is among their top priorities for the nearest future.

In discussing the region it is also reasonable to take Finland into consideration as the consumption inside three Baltic States is relatively low when compared to the costs of building a new pipeline system in the framework of the BEMIP. For example, total consumption of gas is reaching some 5.5bcm (billion cubic metres) per year for three Baltic States and, when adding Finland, it is reaching almost 10bcm/year. Such calculations should be taken under consideration as inclusion of Finland would be economically important as the supplies could be provided for another EU nation with noteworthy quantities of consumption of gas, petroleum and electricity. Balancing costs of infrastructure and the level of consumption is important as it is linked with possible involvement of strategic investors and regional partners to make any concept feasible.

Looking for Options

The Baltic States are not waiting passively to deal with the energy situation and they are constantly looking for solutions. The Baltic States nations are revising their energy strategy and Looking for short- and long-term alternatives. The EU is a natural umbrella and organization that is in a position to support them and to shield them against possible outside attempts to influence their energy policy. The Baltic countries are also discussing possible common approaches based on each nation's priorities. Each nation is looking in parallel for other regional partners to cooperate on energy. For example, Lithuania is trying to increase cooperation with Poland; Estonia is emphasizing her historical relationship with Finland. Already, at the beginning of the current century there were great hopes related to the 80 km long gas pipeline Baltic Connector (capacity 2.4bcm/year), which was supposed to directly link Paldiski in Estonia and Inkoo in Finland (or Helsinki both with the proposed LNG terminal). This would be supported by establishment of supply channels between Incukalns gas storage in Latvia and consumers in Estonia.³¹ Such the projects were supposed to be underway by 2015 following the consolidation of the EU energy market and to improve the overall system and to create an integrated regional response to common challenges. But implementation still requires more discussions that focus on common solutions and proper feasibility studies. Although such studies are time consuming, they could provide a balanced and properly staffed solution to be used the three Baltic States and supported by EU funds.

In the future such the projects as the Finland – Estonia Connector (Baltic Connector), or the 562km long Gas Interconnector Poland - Lithuania (GIPL) with a capacity to reach 2.3bcm/year, are planned to be completed in 2014. Such a vertical approach could increase the flow of supplies and gas security. This is especially relevant as, "in case a gas interconnection between Lithuania and Poland were built, the increase of capacity of the Lithuanian-Latvian interconnection would create more opportunities for using Incukalns UGS and crossborder gas trade"32 that would contribute to all three Baltic states' expectations. The connectors would allow direct access to EU free market as well as with the Polish LNG terminal in Swinoujscie (scheduled for 2014) and other European gas hubs. To make the connectors more effective would require the enhancement of internal gas nets between Lithuania and Latvia, and between Latvia and Estonia, which should be supported by the EU because such projects would reinforce the multidimensional integrity of the organization. Such projects to increase supplies from outside of the region could be supported by building the Intra-Baltic connections and also developing gas storage sites in selected locations to cover the expanded requirements during peak seasons.

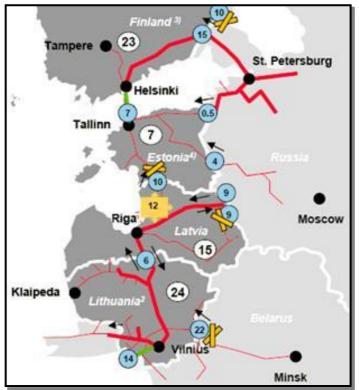


Fig. 4. East-Baltic Regional Gas Infrastructure.

(Red – existing pipelines, green – pipelines under construction. Numbers in blue circles – daily capacity (m cb.m), numbers in white circles – peak demand. Yellow rectangle – the Incukalns storage, yellow crosses – the points used by the study in case of a complete halt in the gas supply)

Source: A. Õepa, Estonia Study: Finland no 1 place for LNG terminal, Estonia no 2, news2biz (Bonnier Group/AS Äripäev), Tallinn 29 October 2012, Picture: Booz & Company

http://news2biz.com/article/2012/11/29/estonia study finland no 1 place for l ng terminal estonia no 2 accessed: 18 April 2013.

The LNG (Liquefied Natural Gas) concept is a promising idea to extend the possible use of the existing infrastructure and it is under study in all the Baltic nations. The Baltic nations are planning to develop their own terminals to enable the delivery the product. Estonia is considering Muuga, Paldiski or Sillamae as terminal locations, Latvia is considering Riga or Ventspils, and Lithuania is focused on Klaipeda. The terminals are of different sizes and their proposed capabilities range from 0,75bcm/year in Klaipeda to 3bcm/year in Muuga. The total amount the terminals can handle is relatively small compared to the capabilities of the Nord Stream that reaches 55bcm per year. Nevertheless, these terminals could support the needs of the respective countries, would create diversification of suppliers, and ensure at the same time that market prices are "determined by supply and demand."33 The possible solutions are of serious interest for the EU, so the European Commission and the Directorate-General of Energy (DG ENER) has asked for the viability report. Booz and Company published this report in November 2012 and provided three reasonable options along with estimated costs³⁴:

- construction of the GIPL gas pipeline and upgrading intra-Baltic gas pipeline connections (some 815m EUR);
- construction of an LNG terminal (capacity 4-8 bcm/year) and Baltic Connector, parallel with upgrading intra-Baltic connections (some 860m EUR);
- making all three major investments (GIPL, Baltic Connector, the LNG terminal), parallel with upgrading connections intra-Baltic countries (some 1.3bn EUR).

The preferred location for LNG terminal could be Estonia (Paldiski) or Finland if that country would be considered as an option. At the same time, building just one terminal is considered too risky but, on the other hand, building one terminal in each country would require common effort and a budget to create a costly regional network. There are other concerns

such as the feasibility of building both a GIPL and a LNG terminal by Lithuania. However, this would be too expensive without EU funding. So, the decision is still to be framed in the regional context.

The challenging energy situation is not only regional problem. Is also related to the needs of all the EU nations as they are trying to recover from the economic crisis and boost their economies. So there is broad interest to find new and reliable options. An example of such delivery routes under discussion is to supply gas directly from Azerbaijan's Shah Deniz gas field using a proposed Trans Adriatic Pipeline (TAP) gas pipeline or the Trans-Anatolian gas pipeline (TANAP). Another project is the projected Nabucco-West, which is an extension of the existing South Caucasus Pipeline. These pipelines could create a so-called "Southern Corridor" that would have the goal of "supplying Europe with gas coming directly from Caspian Basin and the Middle East. It intends strengthening the security of supply for European households and industry by diversifying gas sources and routes, thus minimizing dependence on few suppliers and potential gas cuts."35 The new supplies would increase the volume of gas that could also be transported from the West to the East, including to the Baltic region, if the proper infrastructure will be built in time.

In discussing electricity it is critically important to integrate the Baltic States "into the European electricity grids, in order to achieve a sufficient level of energy security" by developing the BEMIP- related land connections with Finland and Poland, and also to continue the undersea project with Sweden. One important element of a solution is an interconnection project, the LITPOL Link between Lithuania and Poland, with a 1000 MW electricity capacity. This is expected to be completed in 2015. The project was initially delayed by "various political, economic and technical reasons, lack of competence and problems in buying land" and, according to Merle Maigre, also because of the Polish government's hesitation "until the final agreement on the new NPP (Visaginas Nuclear Power Plant) is not reached." Nevertheless, the project is on-going as "the LitPol Link power interconnection not only eliminates Lithuanian energy isolation, but is the first step in order to integrate the Lithuanian electricity system with the Continental Europe" as expressed by Virgilijus Poderys, the CEO of Litgrid. Such a system will be shared equally by national operators

Lihuanian Litgrid AB and Polish PSE Operator S.A and are ready to operate as planned at the end of 2015.

LITPOL Link will be supported by project ESTLINK 2 between Estonia and Finland which "will integrate the Baltic electricity market closer to the Nordic market and increase the supply security of electricity in the Baltic Sea region by increasing the total transmission capacity between Estonia and Finland to 1,000 megawatts."39 The project, with a 650 MW potential, will have total length of 170 km and is supposed to be commissioned at the beginning of 2014. In parallel, NORDBALT lying between Lithuania and Sweden is gradually progressing. The feasibility study "of the Lithuanian-Swedish electricity bridge was completed in early 2008,..., the investments into the project would total about EUR 516 million, if a 700 MW cable is constructed or EUR 637 million if a 1,000 MW cable is utilised."40 But only on 7 March, 2013 dis Vilnius permit, "the NORDBALT link cable in the coastal area and the special economic zone"41 and this decision ensures the continuity of the project and the start of the operation at the end of 2015. In the past also Latvia was interested in the similar project. So there are some very promising current projects making progress to consolidate the EU electricity grids in a predictable timeframe as all of them will be operational by 2015.

The improved infrastructure would enable better vertical interconnections with the EU and the Nordic countries and it could make a more efficient use of the planned nuclear power plant in Visaginas. However, "although an initial statement was signed in 2006, construction has not gone beyond the preparatory stage"42 and the power plant with 1350 MW capacity is not supposed to start electricity delivery before 2022. The project is expensive and estimated to cost some 4 to 6 billion Euros, and the support from investors is still not clear as "they have also been deterred by Lithuanian dithering, lack of progress over the past five years, policy shifts with changing governments, and an inability to come to agreement with partners such as Latvia, Estonia and Poland, as well as the small Baltic market for electricity."43 The steady support of the all Baltic States is important for the continuity of that project which could significantly improve electricity supplies continuity and security. As noted, after completion it could be immediately be supported by the already existing distribution infrastructure. The re-engagement of Poland, which

suspended its contribution in 2011, should be politically supported. The importance of Lithuania for the project was again confirmed by the European Union's Energy Commissioner Günther Oettinger, who said that "Lithuania alone is too small for such a project" and "it is up to the Lithuanian government to decide whether the country should build a new nuclear power plant" leaving the final decision to the country.

The situation as concerns oil supplies is relatively better as there are a few functioning oil terminals in the region, so there is direct and interrupted access to the free market. Sea ports are relatively modern and well equipped, e.g. the Būtingė oil terminal was activated in 1999, and they are used for supplying the necessary amount of resources. Building the Rail Baltica railway line could be an element to support the flow of oil and other freight transport within region and from outside. However, local shale oil is supports local independence and there are currently on-going explorations Estonia and in Lithuania as well find new shale oil and gas deposits and to use them as a reliable energy source.

Along with traditional energy resources the region is very interested in other options and "by 2020, Estonia wants the share of renewable sources for final consumption to increase to 25%, while Latvia aims to have more than 40% from renewables and Lithuania is seeking 23%, "45 This is solely linked with national assets as hydro-energy, solar and geothermal energy, landfill gas, tidal power and others. Some of them are trans-regional in nature. Among them, there is the ambitious Baltic Sea Region Programme 2007-2013 sponsored by the EU in the framework of the European Neighbourhood and Partnership Instrument (ENPI) and it involves such countries as: Denmark, Estonia, Finland, Latvia, Lithuania, Poland, Sweden and the northern states of Germany. This programme includes Norway and Belarus as well. One of elements of the program is offshore wind parks which "is predicted ... to produce 25,000 MW of electricity in 2030 through offshore wind, approximately 65-70 wind parks."46 The concept is still under discussion regarding the required 3,500 km² of Baltic Sea space and in September 2013 a conference titled "Marine spatial planning as a tool for coherent offshore wind energy development in the Baltic Sea Region" will take place in Germany. There are also other ecologically- driven projects to look for other sources of energy, although these are rather complex and no visible results will be seen in many years. Such projects are in line with the EU energy related priority areas as highlighted in the "Action Plan for the European Union Strategy for the Baltic Sea Region" as mentioned previously.

Extending Land Links with the Region

Energy issues were correspondingly discussed between Poland and Baltic States in 2011 during Polish President Bronislaw Komorowski's visit to Estonia and his meeting with Presidents Toomas Ilves, Dalia Grybauskaite and Andris Berzins. At the meeting the Poles noted that common interests could be an important uniting factor in developing projects related to the energy and communications infrastructure. Komorowski said that, "Poland is now building her energy system in such the way that she is achieving expected energy security in many dimensions, but we are interested to have links and infrastructure connections, which would be also open for other nations in the region, including using transfer system for electric energy and gas."⁴⁷ The land infrastructure could be also a factor to support the transfer of oil and LNG using rails and roads, although the scale could be limited by capacities, fragile infrastructure and security concerns.

Fig. 5. The Concept of Rail Baltica Including an add-on Connection to Tartu and Vilnius.



Source: Parts: Leedu peab Rail Balticu übisettevõttega kaasa tulema (Parts: Lithuania must joint Rail Baltic to complete it), Telegram, Tallinn 28 May 2013 http://www.telegram.ee/eesti/parts-leedu-peab-rail-balticu-ubisettevottega-kaasa-tulema#.UbMJhtzbxjp accessed: 04 June 2013.

Komorowski also highlighted the importance of such the projects as railway Rail Baltica⁴⁸ and the Via Baltica Highway as significant elements of a trans-European transport corridor linking Warsaw, Kaunas, Riga, Tallinn and Helsinki. The presidents were very optimistic considering that the project could be finished in 2018 if supported with EU funds. In 2020 it

could be possible to start a rail trip in Tallinn and finish it in Lisbon. However, the EU financial crisis and some national hesitations have delayed all such projects. It is also necessary to remember that Poland is important because of her geographical location—she is a natural link between the current provider of resources (Russia) and the customers (Europe). As soon as proper links (pipeline, power grids, rail lines) could be built they could also support the Baltic region to provide oil, gas and electric power from the West to East, providing more choice and improving security. However, the decision is as much political as economic as supplies from Russia will have a long-term advantage—they are just cheaper.

Another project that could support the important land transportation infrastructure is the railway tunnel beneath the Gulf of Finland to link Helsinki and Tallinn. The project was brought up in 2008 when "the mayors of Helsinki and Tallinn, Jussi Pajunen and Edgar Savisaar signed a letter of intent on a rail tunnel project", ⁴⁹ based on assumption that an application for EU funds would be accepted. The initial estimate of the feasibility study costs will be approximately 800,000 Euros.

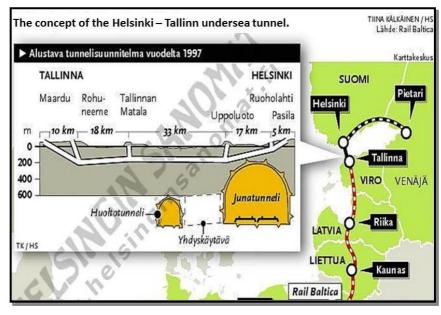


Fig. 6. The Concept of the Helsinki - Tallinn Undersea Tunnel.

Source: Helsinki-Tallinn tunnel to be re-examined, Helsingin Sanomat International Edition, 28 August 2008, http://www.hs.fi/english/article/Helsinki-Tallinn+tunnel+to+be+re-examined/1135238790435accessed: 09 April 2013.

The project was still under discussion and in 2009 the EU refused to funds studies. Olli Keinänen from the International Affairs Department of the City of Helsinki linked this action to local politics as, "it is clear to anyone who knows Estonian politics, that relations between Tallinn, which is run by the Centre Party, and the country's government, are not the best possible." The 82 kilometres long project, estimated to cost some 6-7 billion Euros, will probably be

continued as, "in the long term the tunnel is needed, and it should be built."⁵¹ It could definitely support the commercial transport of goods and also passenger traffic that encourages travel between cities that are a natural extension of Rail and Via Baltica. Additionally, such an international

project would support the basic idea of one European Union and increase the links among member nations. Moreover, a direct communication link bypassing Russia could also show that the reliance on Russia as a transit route is diminishing.

The problems related to multidimensional energy security are important to the top level EU leadership and also for nations or groups of nations that view the matter from a regional perspective. On September 2012 a selfproclaimed "Future of Europe Group", counting eleven EU foreign ministers, issued a Final Report of the Future of Europe Group of the Foreign Ministers of Austria, Belgium, Denmark, France, Italy, Germany, Luxembourg, the Netherlands, Poland, Portugal and Spain. In the report it was recognized that "in the global competition with other economies,..., we need a comprehensive and integrated approach to all components of the EU's international profile. Beyond CFSP and CSDP, it must include, among other things, issues relating to trade and external economic affairs policy ... and energy security."52 The ministers agreed that, "another field where we need 'more Europe' is sustainable energy policy: we need to create a functioning internal energy market through European energy infrastructure, improve energy efficiency and define common external energy relations."53 Such an approach is very important as the future economic development will strongly depend on access to natural resources as consumption is growing and nations are recognizing the need to become energy independent and wish to ensure their long term supplies. For example, the US is considering shale gas as a source of energy independence. The current situation requires a degree of realism in Brussels' policy and to, "focus more of its energy on where it is already policy relevant."54

The meetings and discussions are continuing and there is optimism that solutions will be possible. An example was the Gdansk foreign ministers' meeting of the Vinegar Group (Czech Republic, Hungary, Poland, Slovakia), Nordic Countries (Denmark, Finland, Iceland, Norway, Sweden) and the Baltic States (Estonia, Latvia, Lithuania) in February 2013. Among other topics a common approach to the crisis in the Euro Zone and energy policy was discussed. Such a meeting, uniting the three regional groupings, is good signal of solidarity and the will to cooperate, especially as the Latvian minister Rinkēvičs emphasised that, "although the

Baltic States have been politically integrated into the EU, integration in certain areas of essential importance such as transport and energy is still insufficient."55 That statement found support among other participants. The energy issue was also discussed in Tallinn during the Seminar on the Cooperation of Northern and Central Europe on 12 April, 2013. The event was organized by the Estonian Ministry of Foreign Affairs and the Embassy of the Republic of Poland. Among other topics, Matthew Bryza, Director of the International Centre for Defence Studies in Estonia, delivered a lecture on "Energy issues as a challenge for Nordic, Baltics and V4 and prospects for their cooperation."56 The lecture was followed by a discussion that included ambassadors from the nations involved to include the Russian ambassador. So one sees a real understanding of the challenge, however discussions are not solutions per se, but they are the proper way to find them.

Conclusions

The energy situation is complicated and there are no quick solutions to improve it. It is also important to note that Russia also recognizes the developments in the region and is considering options to preserve its economic influences in the region and in Europe. The Russian energy companies have made huge investments in the new infrastructure, so continued revenue is necessary to pay for the investments. At the same time, there is the will to preserve the control of the existing infrastructure in the Baltic region. Russia is also developing new projects that will possibly complicate the already existing projects. Regarding electricity, the new nuclear power plant in the Kaliningrad Oblast is supposed to be completed in 2016 with a capacity reaching 1200 MW and 2400 MW in As the local needs for energy are limited the vast amount of electricity to be produced is aimed for export. Another project that is proceeding in Ostrovets in Belarus (2400 MW) and will be completed in 2018, also with energy export ambitions.⁵⁸ The restraint will be a lack of infrastructure to sell energy to the EU. Nevertheless, both will be in place before the power plant in Lithuania, which poses the question of its efficiency and feasibility. Russia is also considering an extension of the Nord Stream further into North-western Europe and the UK, and into the Baltic Region as well, although this extension is acceptable to some nations such as Estonia. Moreover, the chairman of Gazprom's Management Committee, Alexei Miller, announced that the company is seriously considering a return to the LNG terminal project in Primorsk, which could serve as leverage for other projects in the region.⁵⁹ As a result, the Baltic nations' projects must be also politically driven and not only economically motivated and decisions based on consensus must be taken to reduce the Russian monopoly. This will require EU projects and funds. Although the Russian companies will still play an important role in the energy market during years to come their drive will be limited by free market opportunities. Moreover, Gazprom is a critical component of Russian foreign policy and a major source of income for the national budget which supports the continued development of the country to include the reform of the armed forces.

Energy security is an issue with no quick and easy solution. There are feasible initiatives, but there are also differences among nations and also among regional priorities, namely the Nordic countries, Baltic States and Central Europeans do not have the same areas of interest. There is also an impression that the Baltic States prefer to be treated separately and there is less emphasis on a common policy. An example is the will of each single nation to build its own LNG terminal without making common feasibility studies and considering the location of gas storage sites as a part of the system. 60 At the same time there is an appreciation of the considerable role of the EU as an institution that represents customers and their needs, and to preserve energy security. All this requires a common approach to suppliers including Russia, the US, and Middle East nations, as well as transit countries such as the Ukraine. This poses a significant question: Is the EU internally ready to face such challenges when representing such diverse nations and national interests? The question is also directly related directly to coordination among the three Baltic nations, which is rather complicated and needs a great deal of improvement. The importance of the Baltic region should be also treated very seriously as the future EU energy market will be much stronger if the three Baltic States will join it. A well-developed market will support the diversification of supply, will

enhance competition among suppliers, and will open the door for a free market that will positively impact gas and oil prices.

The petroleum supply is currently relatively secure because of existing oil terminals in the region that support uninterrupted delivery. The issue is the integration of the region with the EU electric grids, which is very expensive but desirable from the political point of view although this will again require cooperation and decisions. The current electricity projects such as LITPOL Link, ESTLINK and NORDBALT are promising and they are already under construction and visible solutions are not far away. The new Lithuanian nuclear plant, if completed, will provide a real longterm and feasible solution and even allow for electricity export if the grids will be developed. However, it must be done as one package in order to offer a proper approach. As noted earlier, the most complicated situation is related to the gas market as the monopoly of single supplier currently exists that allows the monopoly to manipulate prices-- and Lithuania is paying the highest prices in Europe. As mentioned, there are options to improve the current status but they are still they are in initial stages. So, at first a regional consensus must be reached in order to continue with common agreed solutions based on the EU's financial support.

However, there is an impression that the Baltic nations were so busy in building relations with partners out of region that they had forgotten to build relations inside the region. The current realities are forcing the Baltic nations as the situation is forcing them to cooperate. Yet, at the same time nations place their own interests first so there are some tough choices to face. There are some perceptions that the Baltic nations are not uniting, but rather disuniting, when discussing the energy policy. This situation is preferred by suppliers as it allows them to play with prices and supplies and to greatly influencing the respective nations. Moreover, uncoordinated investments could cause the costs - effect ratio to go negative, especially as the Estonian, Latvian and Lithuanian markets are relatively small. This can also deter private investors and companies to commence involvement in energy projects. The most promising solution could be a closer integration of Finland as the size of that market could encourage more entities to start feasibility studies. Essentially, a single nation investment would likely be unprofitable and gas prices would still compete with

products from Gazprom. Indeed, gas is most challenging among energy commodities and commercial sense must be present in discussing it. So competition and coordination is desired and the EU could be an initiator to facilitate such cooperation that supports European national solidarity and unity.

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